



Administrator Guide

MSDSpro manual for MSDS managers & supervisors

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Installation and Configuration

System Requirements

MSDSpro is designed to function properly on many different computer hardware and operating system configurations. Here are the minimum requirements:

MSDSpro CD Viewer, Web CD, Classic or Plusweb:

Windows 98/Windows NT 4.0/Windows 2000/Windows XP
Pentium 233 mHz
48MB RAM
Hard Drive with 100MB free (+Datafile size)
CD ROM

Windows MSDSpro Enterprise Client:

Windows 98/Windows NT 4.0/Windows 2000/Windows XP
Pentium 233 MHz
48MB RAM
Hard Drive with 10MB free

MSDSpro Enterprise Server:

Windows NT 4.0/Windows 2000/Windows XP Professional
Pentium 400 mHz
128MB RAM
Hard Drive with 100MB free (+Datafile size)
CD ROM

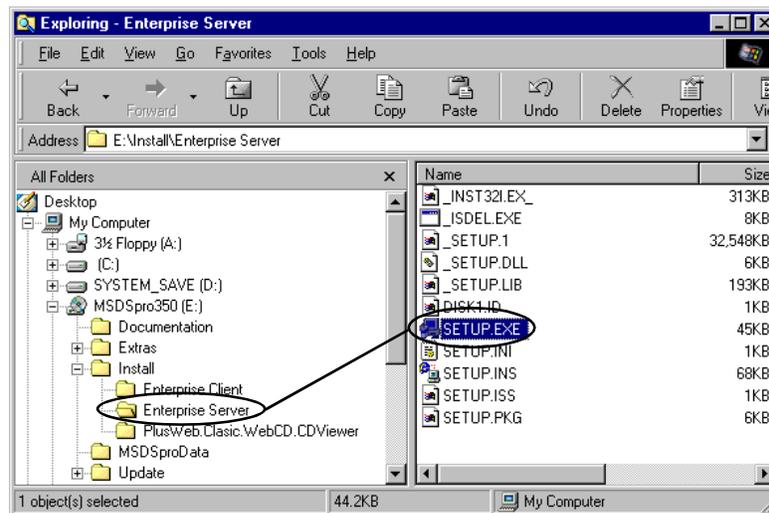
Installation of MSDSpro 4D Server

In an MSDSpro Enterprise installation, MSDSpro 4D Server must be installed before MSDSpro Client workstations will be able to access the MSDSpro Enterprise system. After installing MSDSpro 4D Server, MSDSpro 4D Clients should be installed on workstations that will need to access the MSDSpro Enterprise system.

Be sure that you have at least the minimum amount of required hard drive space to install MSDSpro (see *System Requirements*.)

To install MSDSpro 4D Server, follow these steps:

1. Insert the MSDSpro Installer CD into your CD-ROM drive.
2. Open the *Install/Enterprise Server* folder on the CD, as shown below in Explorer.



3. Double-click Setup.exe to begin the installation of MSDSpro 4D Server.

The default installation location is *C:\Program Files\MSDSpro Server*.

4. Complete the installation.
5. Launch MSDSpro 4D Server.

See *Launching MSDSpro 4D Server* in this section.

Installation of MSDSpro 4D Client

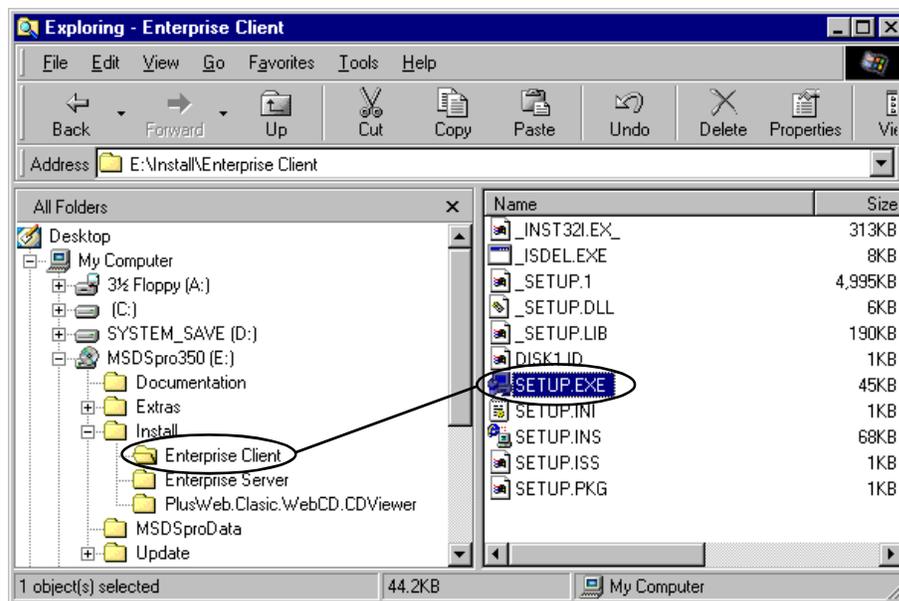
In an MSDSpro Enterprise installation, MSDSpro 4D Clients must be installed on computer workstations that need access to MSDSpro Enterprise after installing the MSDSpro 4D Server.

Be sure that you have at least the minimum amount of required hard drive space to install MSDSpro (see *System Requirements*.)

NOTE: *MSDSpro 4D Client should not normally be installed on the same computer that runs the MSDSpro Server application. Please contact MSDSpro Technical Support if this is required.*

To install MSDSpro 4D Client, follow these steps:

1. Insert the MSDSpro Installer CD into your CD-ROM drive.
2. Open the *Install/Enterprise Client* folder on the CD, as shown below in Explorer.



3. Double-click Setup.exe to begin the installation of MSDSpro 4D Client.

The default installation location is *C:\Program Files\MSDSpro Client*.

4. Complete the installation.
5. Launch MSDSpro 4D Client.

See *Launching MSDSpro Client* in this section.

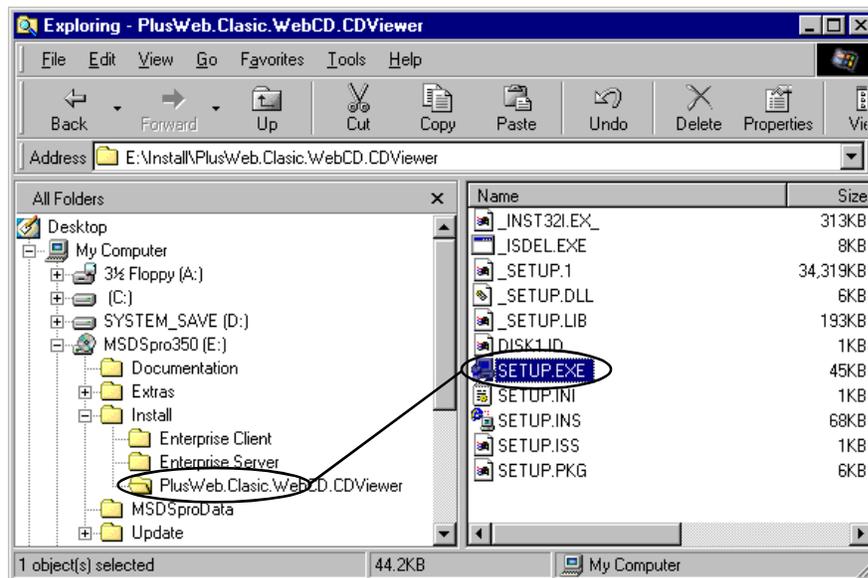
Installation of MSDSpro Standalone Applications

MSDSpro standalone applications consist of MSDSpro PlusWeb, MSDSpro Classic, MSDSpro CD Viewer, and MSDSpro WebCD.

Be sure that you have at least the minimum amount of required hard drive space to install MSDSpro (see *System Requirements*.)

To install MSDSpro standalone applications, follow these steps:

1. Insert the MSDSpro Installer CD into your CD-ROM drive as shown below in Explorer.
2. Locate the *Install\PlusWeb.Classic.WebCD.CDViewer* folder.



3. Double-click Setup.exe to begin the installation of MSDSpro.

The default installation location is *C:\Program Files\MSDSpro*.

4. Complete the installation.
5. Launch MSDSpro.

See *Launching MSDSpro* in this section.

Launching MSDSpro Enterprise

MSDSpro Enterprise is version of MSDSpro designed for administration over a computer network. MSDSpro Enterprise is a Client/Server relational database system (RDBMS), and consists of two applications which work together:

- **MSDSpro 4D Server**
- **MSDSpro 4D Client**

MSDSpro 4D Server contains the MSDSpro database and Web Server, and allows users to access the MSDSpro database. The server should always be available for use.

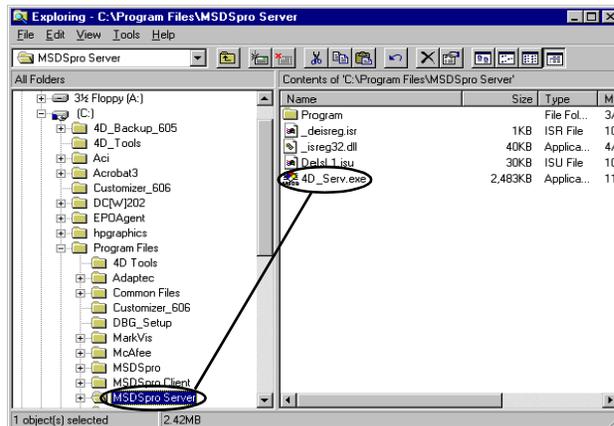
The client workstations contain the MSDSpro 4D Client application, which connect to the MSDSpro 4D Server to use the system.

Launching MSDSpro 4D Server

WARNING: *Windows® NT must be configured for optimal performance before launching MSDSpro 4D Server for the first time. See Configuring Windows® NT for MSDSpro 4D Server later in this section for more information.*

The MSDSpro 4D Server must be launched first, which will then allow Web users and MSDSpro 4D Clients to connect and use the system.

MSDSpro 4D Server must be installed on the server computer. The application can be launched by selecting **MSDSpro Server / 4D_SERV** from the *Start Menu*, or by choosing the default installation location of *C:\Program Files\MSDSpro Server\4D_Serv.exe* as shown below in Explorer:

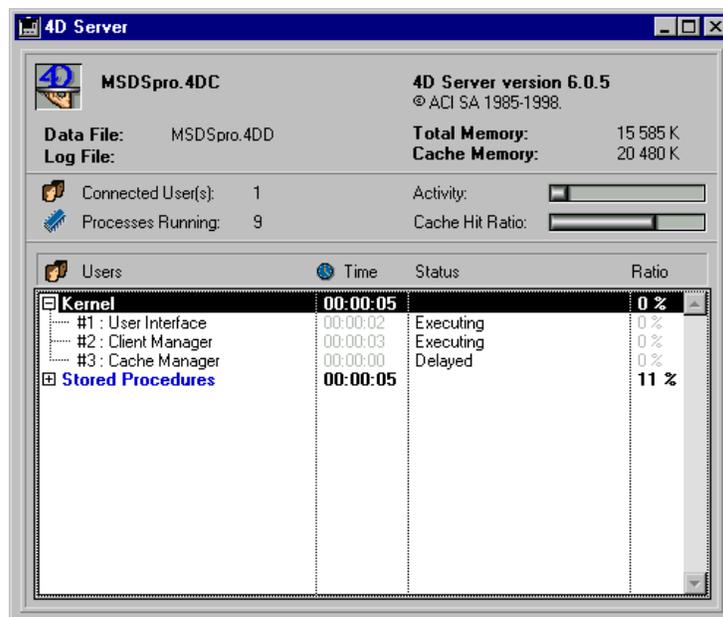


Launching MSDSpro 4D Server (Cont'd)

To launch MSDSpro 4D Server:

1. Select *MSDSpro Server / 4D_Serv* from the *Start menu*.

After successfully launching MSDSpro 4D Server, the screen below is shown. No modifications to the settings are required for standard operation of the MSDSpro Enterprise system. For optimization, see *Configuring Database Cache Memory Settings* later in this section.



WARNING: *One (1) Windows® NT Server setting must be modified to function properly with MSDSpro 4D Server before launching the application. See Windows® NT: Configuration for Network Applications later in this section.*

Configuring MSDSpro 4D Server

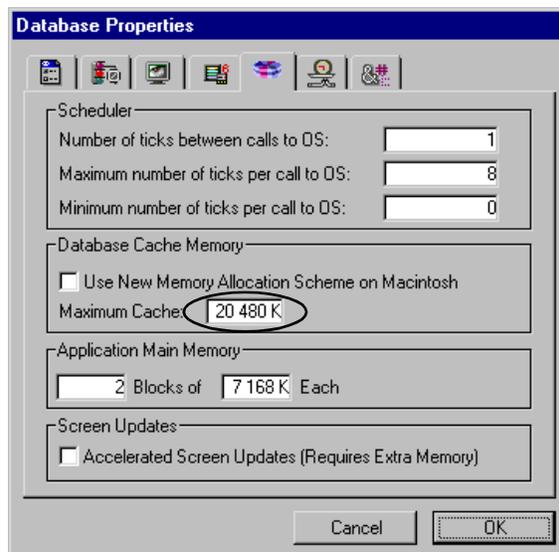
Configuring Database Cache Memory Settings

MSDSpro maintains an internal Database Cache Memory, independent of any Operating System cache. It can be modified to improve performance.

To modify the size of the Database Cache Memory:

1. **Launch 4D Server as shown in this section.**
2. **Choose *Database Properties...* from the *File* menu.**

Choose the 5th tab (“Tune Up”) from the *Database Properties* window. The **Maximum Cache** setting is shown with 20 MB (20480 KB) of RAM dedicated to the database cache. As a general rule, adding more memory to this setting will increase performance as long as the server computer has enough physical memory to support the specified setting. The **Database Cache Memory** is in addition to the **Application Main Memory**, which is set at 14 MB (2 blocks of 7168 KB each). Therefore, the settings shown require at least 34MB of physical memory dedicated to the server operation.



Configuring Database Cache Memory Settings (Cont'd)

3. Click OK to accept the changes, or CANCEL to leave the settings unchanged.
4. Quit and re-launch the MSDSpro 4D Server application for changes to take effect.

Windows® NT: Registering as a Service

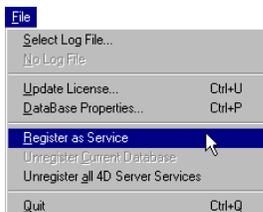
MSDSpro 4D Server can be registered as a Windows® NT Service. When a MSDSpro 4D Server database is registered as a service, it can be launched automatically at system startup and is not shut down when the user terminates the current Windows® Log session.

No more than one instance of a service can be running at a time.

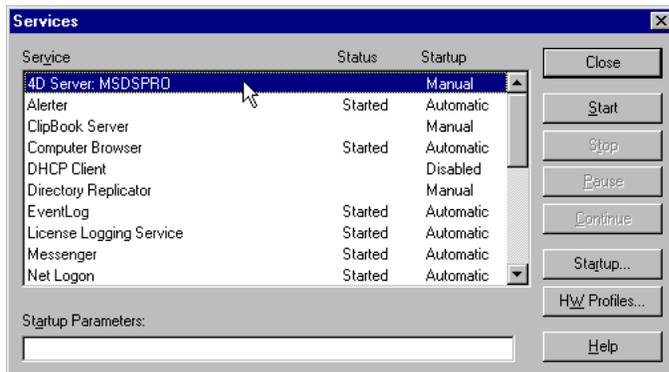
NOTE: Registering MSDSpro 4D Server as a service is only available on Windows® NT 3.x, 4.x, 2000 and XP. The three menu items are disabled on other versions of Windows®.

To register MSDSpro 4D Server as a Windows® NT Service:

1. Select **Register as Service** from the 4D Server File menu.



The *Windows® NT Services Control Panel* will display an entry for 4D Server:MSDSpro



Windows® NT: Registering as a Service (Cont'd)

2. Double-click the entry to display the *4D Server:MSDSpro Service Properties* window, or click the **STARTUP** button.

Within the *Service Properties* window, you can specify the MSDSpro 4D Server service to automatically start at system startup and provide login information. You can also specify the service to be hidden (so it doesn't interact with the Desktop). We recommend allowing the service to interact with the desktop for ease of server administration.



3. Click **OK** to accept the changes, or **CANCEL** to leave the *Service Properties* unchanged.
4. Click the **CLOSE** button to close the *Windows® NT Services Control Panel*.

To unregister the database as a service, select *Unregister Current Database* from the MSDSpro 4D Server *File menu*.

The service registration status of MSDSpro 4D Server cannot be changed from within 4D Server, if the application has been launched as a service when Windows®NT was started. In this case, the three menu items are disabled. To stop the service, use the Windows®NT Services Control Panel.

WARNING: *The full pathname for your database structure file cannot exceed 250 characters.*

Windows® NT: Configuration for Network Applications

WARNING: *When MSDSpro 4D Server is installed on Windows® NT, the configuration of a specific Operating System setting is required before launching the application.*

By default, Windows® NT will attempt to provide maximum performance for File Sharing. This means that Windows® NT will attempt to store large amounts of hard disk information in RAM, which is much faster to access than the hard disk. This default setting can dramatically increase the amount of physical memory occupied by the Windows® NT Operating System itself.

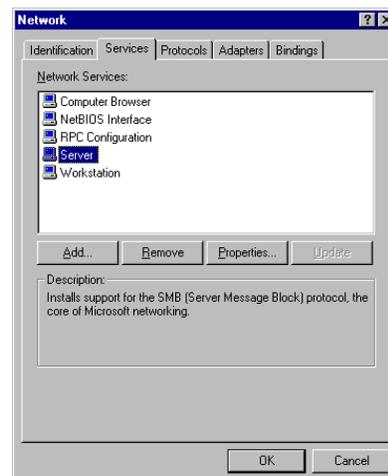
However, MSDSpro 4D Server has an internal disk cache mechanism which optimizes queries and sorts which have been performed by the database. This requires that Windows® NT must not cache the same disk activity (as this will eventually cause degraded performance and can lead to the system becoming unresponsive until the server machine is restarted.)

To configure Windows® NT memory for Network Applications:

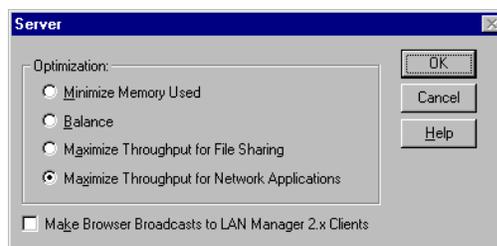
1. Open the *Windows® NT Control Panel*.
2. Select the *Network Control Panel*.



3. Select the *Services* tab.
4. Select the Server service.



5. Select **MAXIMIZE THROUGHPUT FOR NETWORK APPLICATIONS**.



6. Click the OK button to save changes and restart the server machine if required.

Launching MSDSpro 4D Client

The MSDSpro 4D Server must be launched first, which enables MSDSpro 4D Clients to connect and use the system.

The first time an MSDSpro 4D Client is connected to MSDSpro 4D Server, it must be registered. Enter product registration information (as supplied on the Registration Card which was included in the initial shipment.) You must enter the information exactly as shown on your Registration Card (using capital letters and zero's):

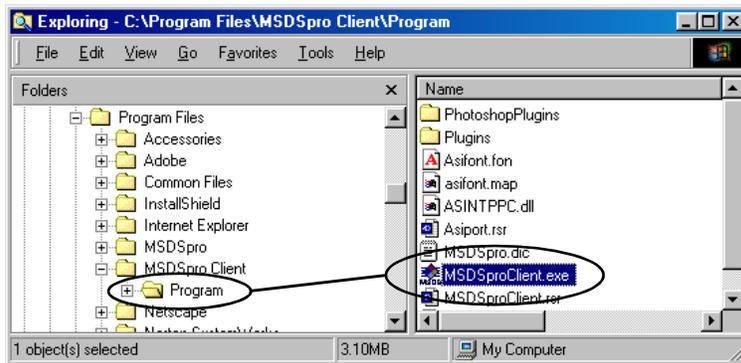
1. Enter the Name exactly as shown on your Registration Card.
2. Enter the Organization exactly as shown on your Registration Card.
3. Enter the ID exactly as shown on your Registration Card.

The screenshot shows a software dialog box titled "Identification". At the top left is the MSDSpro logo, and at the top right is the text "Welcome to MSDSpro". Below this, a message states: "By clicking Demo, you will enter MSDSpro in demonstration mode to begin your 60 day free trial." The dialog contains three input fields: "Name" with the text "Matthew Cohen", "Organization" with "Matthew Cohen Enterprises, Inc.", and "ID" with the alphanumeric string "AW435Q43WC45435Q2C543WETR67B46F". At the bottom of the dialog are three buttons: "Quit", "Demo", and "Register".

4. Store the Registration Card in a safe place for future reference.

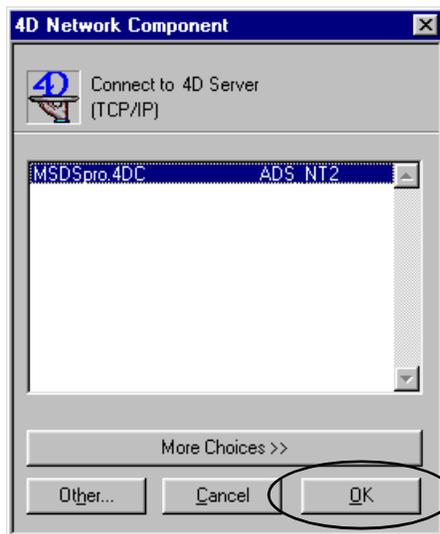
Launching MSDSpro 4D Client (Cont'd)

MSDSpro 4D Client application should be installed on workstations. The default installation location is *C:\Program Files\MSDSpro Client*, as shown below in Explorer.



To launch MSDSpro 4D Client:

1. Select *MSDSpro Client* from the *Start menu*, or double-click MSDSproClient.exe in the *MSDSpro Client\Program* folder as shown above in Explorer.
2. From the *4D Network Component/Connect to 4D Server* window, select "MSDSpro.4DC".



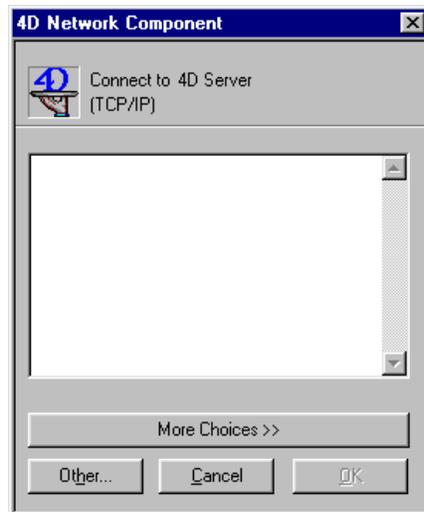
3. Click the OK button to connect to the MSDSpro 4D Server.

Launching MSDSpro 4D Client (Cont'd)

If you don't see a listing showing Mdspro.4dc, one or more of the following factors may be contributing to the problem:

- The Network may not be functioning.
- The MSDSpro 4D Client application may not be configured properly to communicate on the network.
- The MSDSpro 4D Server may not be started.
- The MSDSpro 4D Server may not be configured properly to communicate on the network.

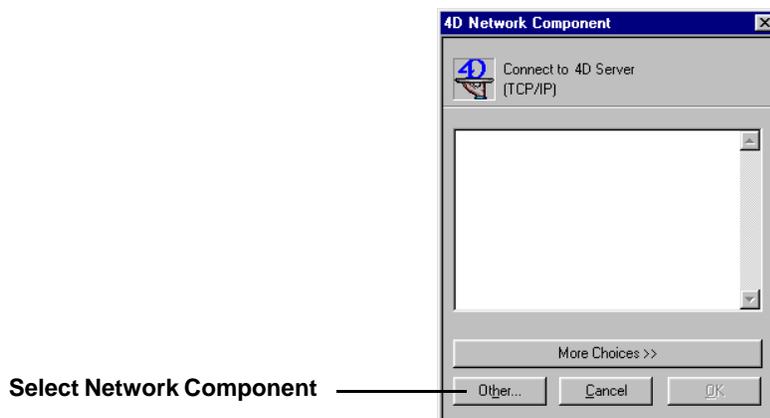
See the next topic for information on how to select a network component and configure the network settings.



Selecting MSDSpro 4D Client Network Components

To select an alternate Network Component to communicate over the computer network:

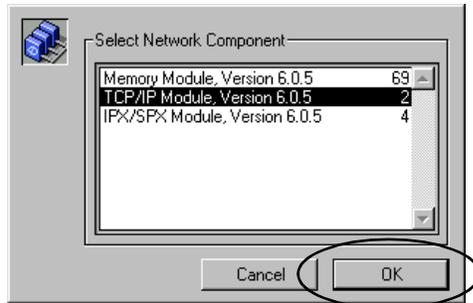
1. Click **OTHER** from the *Connect to 4D Server* window.



Selecting MSDSpro 4D Client Network Components (Cont'd)

The *Select Network Component* window will appear and a list of available Network Components will be shown.

2. Select the correct module (either TCP/IP or IPX/SPX).

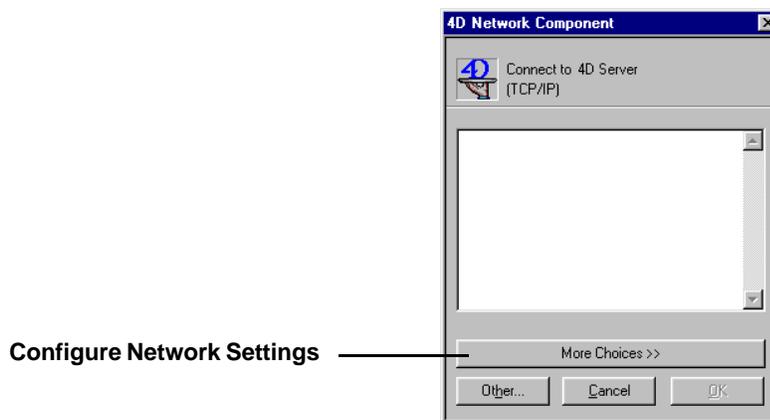


3. Click the OK button.

Configuring MSDSpro 4D Client Network Settings

To Configure MSDSpro 4D Client Network Settings:

1. Click MORE CHOICES from the *Connect to 4D Server* window.



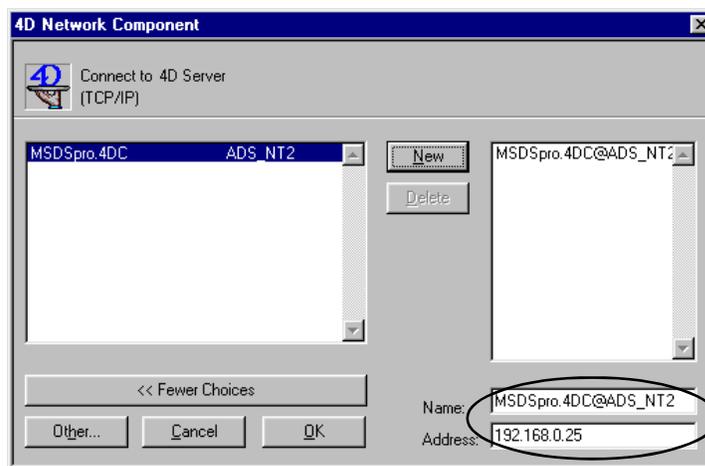
Configuring MSDSpro 4D Client Network Settings (Cont'd)

2. **Name** should be **Msdsp.4dc@*machinename***.

This information should be supplied by your network administrator.

3. **Address** should be the **MSDSpro Server network address**.

This information should be supplied by your network administrator.



4. Click the **NEW** button to add it to the list at the top right.
5. Click **OK** to connect to MSDSpro Server.

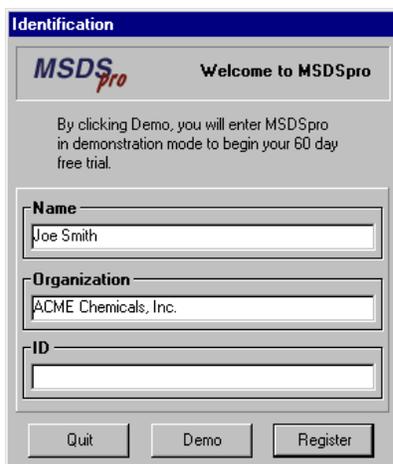
Launching MSDSpro Standalone Applications

To launch MSDSpro PlusWeb or MSDSpro Classic, select it from within *Start menu / Programs* or double-click **MSDSpro.exe**.

Registration

The first time you use MSDSpro, you will be required to enter product registration information (as supplied on the Registration Card which was included in the initial shipment):

1. Enter the Name **exactly** as shown on your Registration Card.
2. Enter the Organization **exactly** as shown on your Registration Card.
3. Enter the ID **exactly** as shown on your Registration Card.



The screenshot shows a dialog box titled "Identification" with a blue header. Below the header, the MSDSpro logo is on the left and "Welcome to MSDSpro" is on the right. A message states: "By clicking Demo, you will enter MSDSpro in demonstration mode to begin your 60 day free trial." There are three input fields: "Name" containing "Joe Smith", "Organization" containing "ACME Chemicals, Inc.", and "ID" which is empty. At the bottom are three buttons: "Quit", "Demo", and "Register".

4. Store the Registration Card in a safe place for future reference.

Demo Mode

MSDSpro will function in Demo mode without a Registration ID for a period of 60 days from activation. Each time you access MSDSpro, it will present the registration screen.

While in Demo mode, the printing and save/export functions are disabled, and web served documents are limited in how much of the document is shown to the web browser.

After a period of 60 days, MSDSpro will no longer function in Demo mode. You must purchase a license to continue using the system.

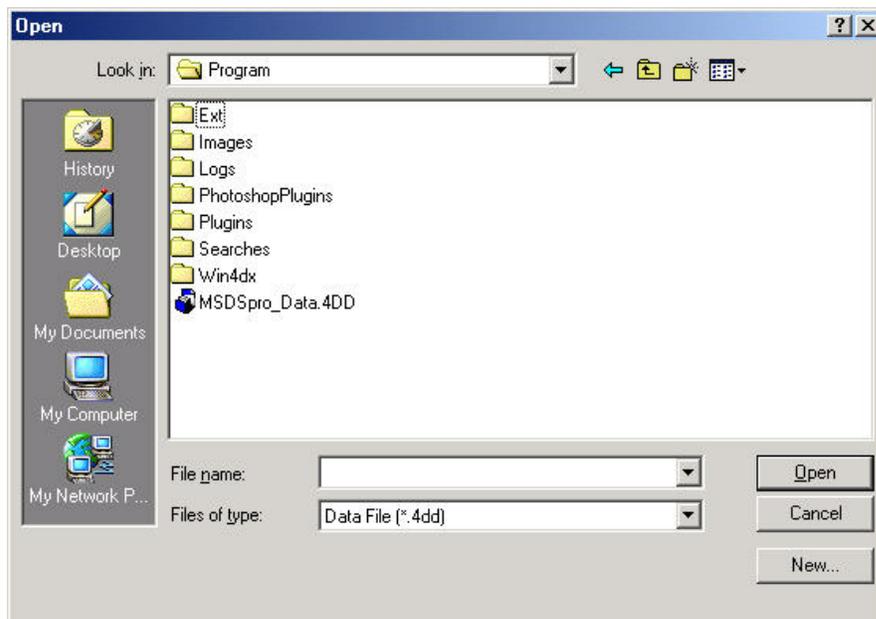
Choosing your database

When launched MSDSpro will automatically load the most recently used database. If more than one database exists the user can load the database of their choosing using the following steps.

1. Launch either MSDSpro Server or MSDSpro.

From the Start menu select either MSDSpro Server/ 4D_Serv or MSDSpro/ MSDSpro.

2. Hold down the ALT key immediately after launching MSDSpro. An *Open* window will appear.



3. Select the database to be accessed by MSDSpro.

4. Click the OPEN button.

User Name and Password

After successfully launching MSDSpro, the appropriate password must be entered to use the User Names shown.

- **DBA, EHS, Supervisor and DBO User Names require passwords.**

The DBA password is “dba”.

The EHS password is “ehs”.

The Supervisor password is “supervisor”.

The DBO password is “dbo” (DBO is an optional User Name that may be created.)

- **Viewer/User does not require a password.**

NOTE: Passwords can be modified by the DBA, or the optional DBO. See the Special Functions section.

To enter a User Name and Password:

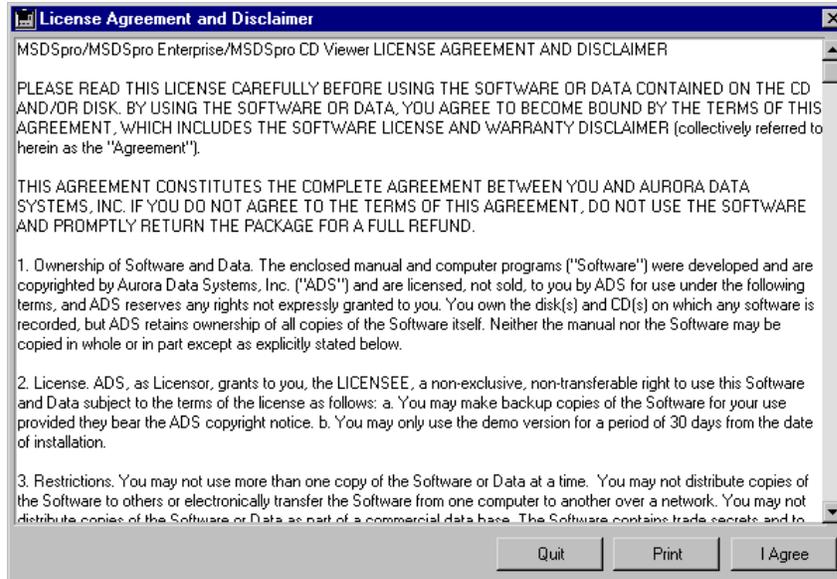
1. **Select the appropriate User Name**
2. **Enter the Password**
3. **Click the OK button**

Clicking the **QUIT** button will close the application.



Accepting the License and Disclaimer

The first time you use MSDSpro, MSDSpro PlusWeb, or MSDSpro Enterprise, you must agree to the terms and conditions contained within the License Agreement and Disclaimer. If you do not agree to the terms and conditions set forth within the License Agreement and Disclaimer, you may click the **QUIT** button to quit the application.



Contacting MSDSpro

e-mail support@MSDSpro.com

Website www.MSDSpro.com

NOTE: *Be sure to visit the MSDSpro Software Development website at www.MSDSpro.com to review our Online Knowledge Base (OKB) within our Support area for the latest information about MSDSpro and related technologies.*

Technical Support (907) 334-4271

Fax (907) 274-6635

Contacting by Mail MSDSpro
4720 Business Park Blvd, Suite G-42
Anchorage, AK 99503

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Admin User Access

User Roles

Multiple User Roles are available, allowing different workgroups to access the system with different privileges.

The ability to add, modify, and delete data depends on the authorization granted to the User Role:

<u>User Role</u>	<u>Access Group</u>	<u>Privilege</u>
Database Owner (DBO)	Database Owner	Password Editor Only (DBO is optional)
Database Administrator (DBA)	DB Admin	View Records Add Records Edit Records Delete Records Import/Export from all tables Archives Password Editor (If DBO not engaged) System Preferences All Update Options Reports
EHS	Edit	View Records Add Records Edit Records Delete Records Import/Export from all tables Archives All Update Options Reports
Supervisor	Browse	View Records Basic Reports & Labels
Viewer/User & Web User	-	Read-only MSDS viewing interface

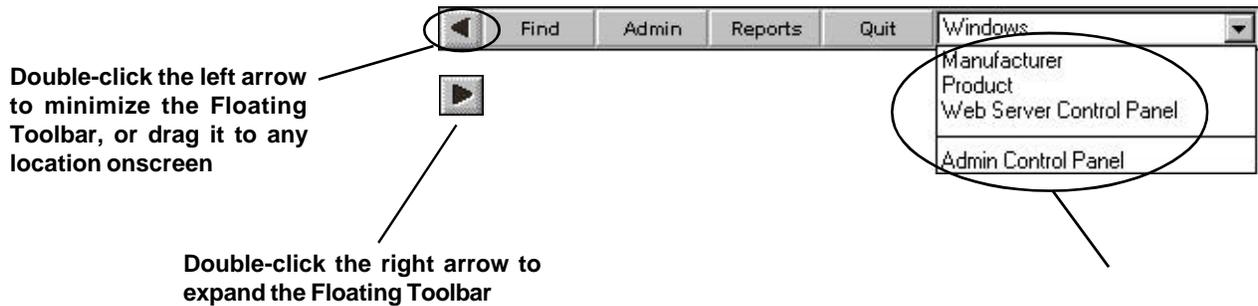
Floating Toolbar

The Floating Toolbar floats above other open windows, and is positioned in the top-left corner of the screen. Clicking **Find**, **Admin**, or **Reports** will bring up the associated windows. Clicking **Quit** will exit the application.

You can select from a list of open windows by clicking the Windows pull-down menu, as shown.

If the Floating Toolbar interferes with an active window, simply double-click the small left arrow. The Floating Toolbar will be minimized and become a small right arrow. Double-click the right arrow to show the Floating Toolbar bar once again.

HINT: Drag the Floating Toolbar to any location onscreen by clicking on the arrow and dragging.



Admin Control Panel

The *Admin Control Panel* allows Admin users to access specific Data Access screens, Special Functions and Updates to the data within MSDSpro.

- **Data Access tab:** These areas use *conventions* to consistently present data in a standardized, understandable format (see *Database Conventions*).



Admin Control Panel (Cont'd)

- **Human Resources tab:** These areas allow the update of information relating to an organization's Departments, Employees and Groups.



- **Special Functions tab:** *Import/Export* and *Archives* follow the same database conventions as Data Access areas. *Password Editor* and *Preferences* are special areas that control how MSDSpro functions and can only be accessed by users with administrator access.



Admin Control Panel (Cont'd)

- **Updates tab:** These areas allow the update of specific database information from different sources.



Reports Control Panel

The *Reports Control Panel* allows users to create various comprehensive reports with the data stored within MSDSpro. The *Reports Control Panel* is divided into four areas:

- **Product and Inventory tab:** Reports that Admin Users may regularly access. See *Section 7: Reports* for more information on each report.

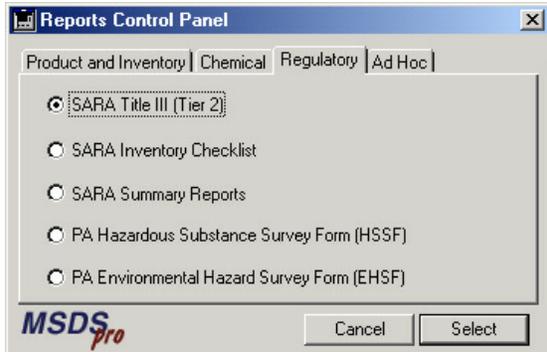


Reports Control Panel (Cont'd)

- **Chemical tab:** Reports detailing information about specific chemicals as they are used within Products at specific Locations.



- **Regulatory tab:** Reports for Regulatory Agencies, such as SARA reports for the local and state emergency planning authorities. See *Section 7: Reports* for more information on each report.



- **Ad Hoc tab:** Access to produce reports and container labeling for custom needs. See *Section 7: Reports* for more information on each report.



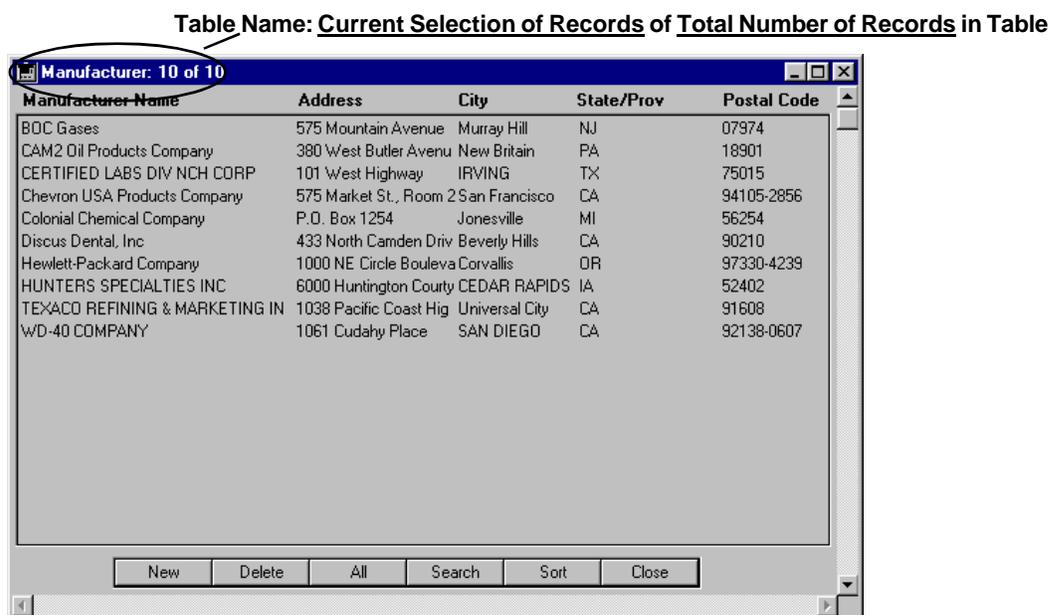
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Database Conventions and Operations

The design of screens, the placement and names of buttons, and the available menus conform to specific *database conventions* that were designed into MSDSpro. All forms that allow MSDSpro administrator access to the database tables for data entry and browsing use the same conventions as shown.

Output Forms

Output forms list records, showing only a small summary of the data contained within the records. The title at the top of the window displays the name of the table currently being accessed, the number of records in the *current selection*, and the total number of records within the table. The *current selection* refers to the currently selected records in the *Output form*, in a sorted order. Most Output forms allow for seven actions.



- Click on the **NEW** button to create a new record.
- Click on the **DELETE** button to remove the highlighted record.
- Click on the **EDIT** button to modify the information relating to the highlighted record.
- Click on the **ALL** button to view the entire list of records.
- Click on the **SEARCH** button to search for records matching a specific criteria.
- Click on the **SORT** button to sort the records.
- Click on the **CLOSE** button to close the *Output form*.

Data Entry Forms

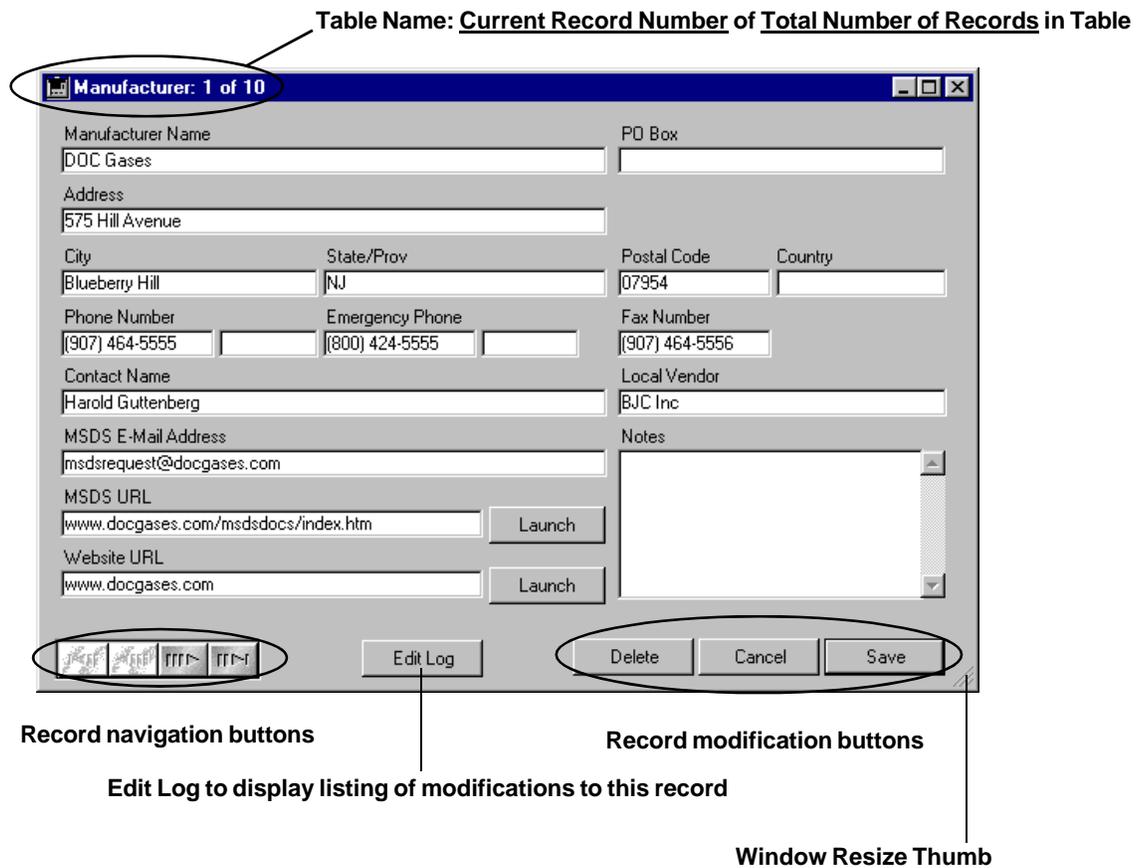
Data Entry forms allow you to modify or browse the entire record in detail. Double-clicking a record from the *Output form* will present the record in the *Data Entry form*. If the current user's User Role allows modification, the record will be editable.

The record navigation buttons allow movement between records, and will save any modifications to the record before displaying the next record. The buttons (left to right) are **FIRST** record, **PREVIOUS** record, **NEXT** record, and **LAST** record.

The record modification buttons are **DELETE**, **CANCEL**, and **SAVE**. **DELETE** will delete the current record shown and return to the *Output form*. **CANCEL** will cancel any changes to this record and return to the *Output form*. **SAVE** will save changes to the record and return to the *Output form*.

EDIT LOG will display a list of modifications made to the record, listed by date, time, and username. If the **EDIT LOG** button is not visible, this preference has been turned off by the DBA.

The title at the top of the window shows the name of the table, and the currently selected record out of the total number of records.



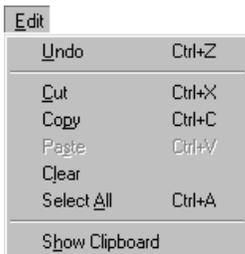
Menus

File Menu



- Preferences allows workstation-specific settings to be modified.
- Import... presents the *Import editor* for the current table.
- Export... presents the *Export editor* for the current table.
- Page Setup allows changes to the default printer setup.
- Print... presents the *Print Choices* window.
- Report Editor... presents the *Report editor* for the current table.
- Quit exits the application.

Edit Menu



- Cut, Copy, Paste, Clear perform clipboard operations.
- Select All from an Output form will highlight all records shown.
- Show Clipboard displays the contents of the Clipboard.

Selection Menu

- Show All displays all records in the current table.
- Show Subset selects only the highlighted records for the current selection.
- Omit Subset removes the highlighted records from the current selection.
- Add Records allows a new record to be added within the current table.

Selection Menu (Cont'd)

Selection	
Show All	Ctrl+G
Show Subset	Ctrl+H
Omit Subset	Ctrl+J
Add Records	Ctrl+N
Delete Records	Ctrl+K
Copy Records	
Search Editor...	Ctrl+S
Sort Editor...	Ctrl+T
Apply Formula...	
Archive Selected Products	
Close	

- **Delete Record** deletes the highlighted records in the current open window.
- **Copy Records**
- **Search Editor...** presents the *Query editor* to search for records.
- **Sort Editor...** presents the *Order By editor* to sort the current selection.
- **Apply Formula** presents the *Formula editor* to apply a formula.
- **Archive Selected Products** only functions within the Product table.
- **Close** closes the current open window.

Searching

Searching is one of the most common database operations. A search is often the most convenient way to select the records with which you want to work.

The term *searching* refers to finding a group of records in the database based on the contents of one or more fields. You perform a search by specifying a search condition. A *query* is a set of instructions that tells MSDSpro which records to include in the current selection.

A query always has three elements: field name, comparison operator, and value. The field name is from the current table or a related table. The comparison operator tells MSDSpro how to compare the contents of the field to the value you specify (equal to, greater than, less than.) The value specifies the number, string, or other value to which each record is compared.

Suppose you want to see all the records for products with revision dates before 1/1/95. The search condition you would use is "Revision_Date is less than 1/1/95." "Revision_Date" is the field, "is less than" is the comparison operator, and "1/1/95" is the value.

When you search a database, MSDSpro compares the contents of the field in the search condition to the value you specify. The new current selection is made up of records that satisfy the rules stated in the query. The new current selection can be no records, one record, a group of records, or all the records in the table.

You can search on fields from other tables, provided that a relationship exists between the tables.

When you do the search, the new current selection is displayed in the *Output form*. You can reset the current selection to all the records in the current table by choosing *Show All* from the *Selection menu*, or clicking the **ALL** button at the bottom of the *Output form*.

Indexed and Sequential Searches

MSDSpro can carry out queries very quickly if it has an ordered list of records to work from. An ordered list is called an *Index*. An index is associated with a particular field and is stored on disk as part of the data file.

A query that is performed without an index is slower than an indexed query because the MSDSpro must start at the beginning of the table and examine each record until it finds the records that meet the criteria you have set. To be sure that it has found all the records you are looking for, it must examine every record in the table sequentially. This process is called a *sequential search*.

If an index is available, the program "knows" where the target records are located. If you are searching for all products with a product name of Lead, the program will know where in the file the Lead records are located. Thus, it doesn't need to examine every record in the file, and is very efficient. This process is called an indexed search.

Indexed and Sequential Searches (cont'd)

A good analogy for an index is a card catalog in a library. The card catalog is an alphabetized list of all the books in the library. Each record in the catalog contains information about where the book is physically located. If you are looking for a particular book, it would be very inefficient to conduct a sequential search of the library's entire holdings. It is much faster to consult the card catalog, obtain the location of the book, and then search the particular shelf on which the book is stored.

As you enter or import records, MSDSpro automatically updates all indexes. When you do searches, MSDSpro automatically uses indexes if they are available.

Comparison Operators

When you write a query, you tell MSDSpro how to compare the value you specify to the contents of the database. For example, the query, "Name is equal to 'Lead'" uses the "is equal to" comparison operator. It tells MSDSpro to compare the values in the product name field to the string "Lead."

Comparisons involving alphanumeric values are not case sensitive. A search on the product name "Lead" will find records containing "lead," "LEAD," "LEad," and so on.

The following comparison operators are available:

- **Is equal to**
- **Is not equal to**
- **Is greater than**
- **Is greater than or equal to**
- **Is less than**
- **Is less than or equal to**
- **Contains**
- **Does not contain**

NOTE: Queries using the Contains and Does not contain operators are always sequential queries.

MSDSpro also has a wildcard character (@) that substitutes for one or more characters in the value being searched for. You use the wildcard character to do a "begins with" search. For example, to find products whose product name begins with "L," you would use the search condition, "Name is equal to L@." That is, you use "L@" as the value to be searched for. Using the wildcard character with the "is equal to" comparison operator is equivalent to a "begins with" comparison.

The @ symbol is used throughout MSDSpro as the wildcard character and is not limited to search conditions.

The wildcard character can be used only with Alpha or Text fields; it cannot be used in a Numeric or Date search.

Simple and Compound Searches

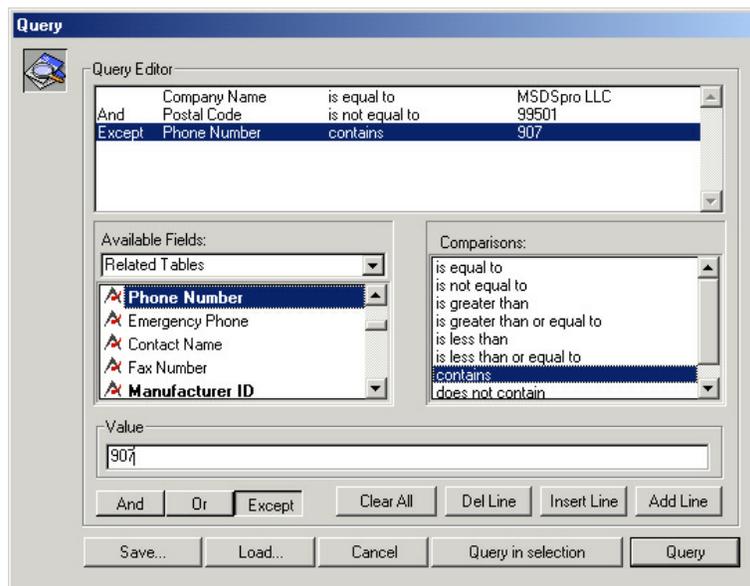
You can search on one or more fields. A query on one field is called a *simple* query. For example, the search “Name is equal to ‘Lead’ ” is a simple query. When you do a simple query, MSDSpro examines the contents of one field when searching the database.

A query on two or more fields is called a *compound* query. When you do a compound query, you combine separate queries using a conjunction operator. The conjunction operator tells MSDSpro how to combine the results of the individual queries. There are three conjunction operators:

- **And:** This operator finds all the records that meet two conditions simultaneously. For example, the query “Find all the products that have a hazard rating of 2 and that are older than 1/1/95” will find the records of only those products that have a hazard rating of 2 and that have revision dates older than 1/1/95.
- **Or:** This operator finds all the records that meet either of two conditions. For example, the query “Find all the products that have a hazard rating of 2 or that are older than 1/1/95” will find the records of all the products with a hazard rating of 2, as well as all the products that are older than 1/1/95, regardless of their hazard rating.
- **Except:** This operator is the equivalent of “not.” The query “Find all the products that have a hazard rating of 2 except those which are older than 1/1/95” will exclude the all of the products that are older than the date 1/1/95.

The conjunction operators let you create compound queries such as “Find the manufacturers named MSDSpro who don’t have an area code of 99501 but whose phone number contains the digits 907”.

The figure below shows this query being specified in the *Query editor*.



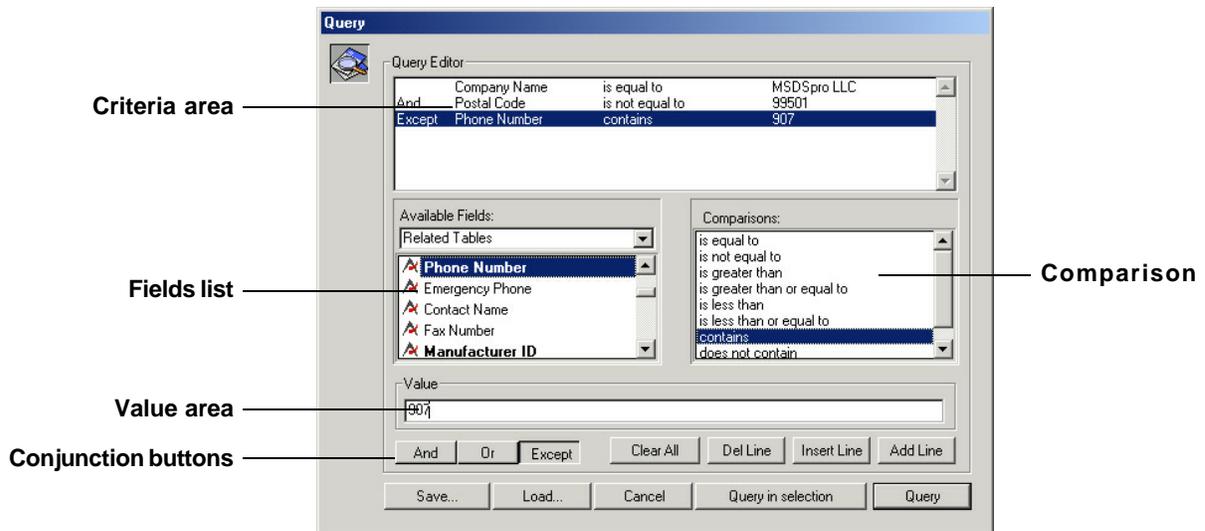
The Query Editor

The *Query editor* is accessed from the *Selection menu*, or by clicking the **SEARCH** button in the *Output form*. The one exception to this is when a user clicks the **SEARCH** button on the *Product Output form*. Clicking on the **SEARCH** button on the *Product Output form* loads the *Advanced Search editor*.

The *Query editor* is a general-purpose editor that can be used to create simple or compound queries. The *Query editor* lets you create compound queries linked with the And, Or, or Except conjunctions. For example, you can use the *Query editor* to perform a query for all products which have a hazard rating of 2 or are newer than 1/1/97.

- The *Query editor* gives you the choice of searching through the current selection of records or all the records in the table.
- The *Query editor* lets you save queries to disk and open them when you want to repeat the query.
- The *Query editor* allows you to search on any field in the current table and any fields in related tables. Related tables are other tables within the database that have a Many to One relationship to the current table. An example of this is the relationship that exists between the product table and the manufacturer table. One manufacturer can make many products. Likewise, many products (and many product records) can be associated with one manufacturer. Since this many to one relationship exists between the product table and the manufacturer table then information in the manufacturer table can be searched from the product table.

Searches on related tables are always sequential, even if the field being searched on is indexed, which is slower than a search only within the same table.



The Query Editor (Cont'd)

The *Query editor* contains the following areas:

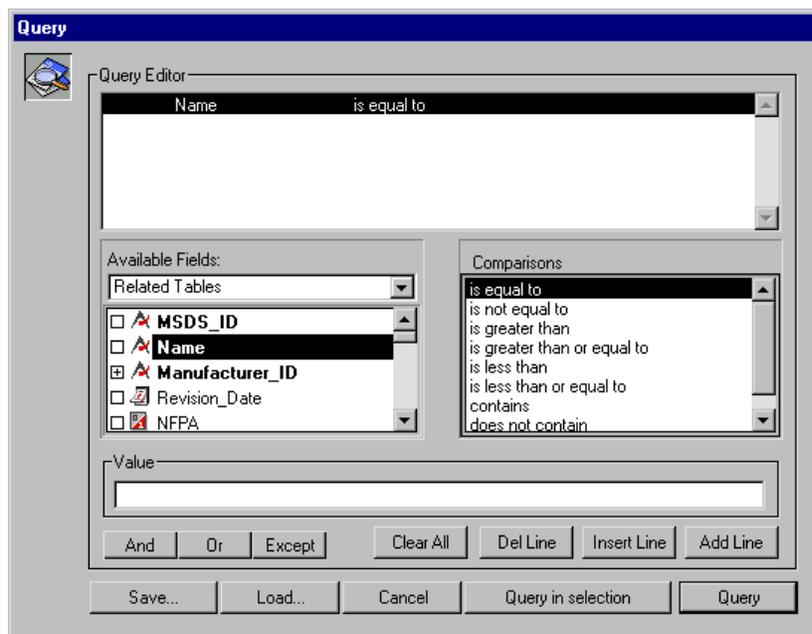
- **Criteria area:** This area displays your query as you create it or after you load it from a disk file.
- **Fields list:** This area displays a hierarchical list of the fields in the current table. Indexed fields are shown in boldface. If there are related tables, the foreign key fields in the current table can be expanded to display the fields in the related tables.
- **Comparison Operator area:** This area displays a list of comparison operators.
- **Conjunction buttons:** This area contains three buttons that correspond to conjunction operators you can use to join current simple query to the previous simple query.
- **Value area:** You enter values for which you want to search in this area.
- **Query in selection button:** This button performs the query only on the records in the current selection.
- **Query editor buttons:** You use this area to save your queries, load other queries from disk, cancel the query, or execute the query.

To create a query:

1. **Select *Search* from the *Select menu*, or click the **SEARCH** button from an *Output form* other than the *Product Output form*.**

MSDSpro displays the *Query editor*, highlighting the first row of the Criteria area.

2. **Click a field name to use in the query. If you don't want to use the "is equal to" operator, click the desired comparison operator.**

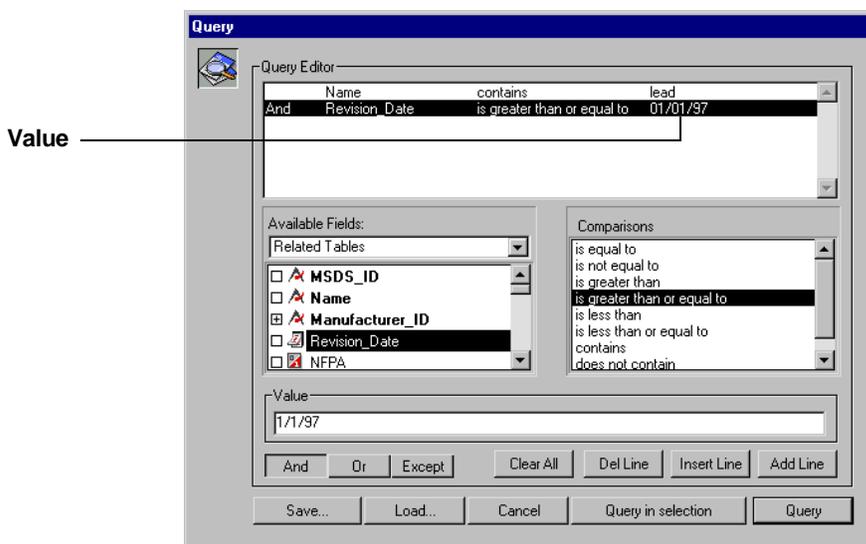


The Query Editor (Cont'd)

Comparison operator choices:

- Is equal to
- Is not equal to
- Is greater than
- Is greater than or equal to
- Is less than
- Is less than or equal to
- Contains (Alpha and Text fields only)
- Does not contain (Alpha and Text fields only)

3. Type the value for which you want to search for in the Value area.



In a Text or Alpha field you can use the wildcard character (@) at the end of the value to request a “Begins with” search.

If the field you selected is a Boolean field, MSDSpro displays a pair of radio buttons.

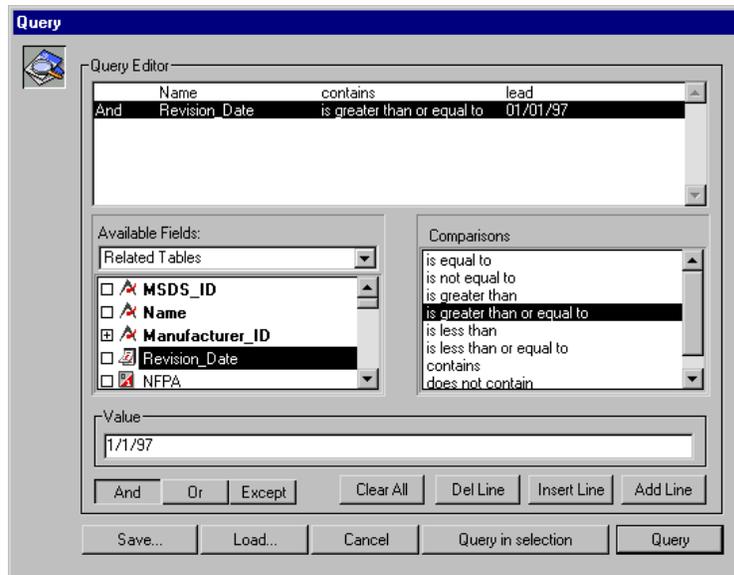
4. To add another simple query, click **ADD LINE**.

MSDSpro adds a new line using the “And” conjunction operator.

5. To use the “Or” or “Except” operator, click the desired conjunction operator button.

Repeat steps 2 and 3 to build the second simple query.

The Query Editor (Cont'd)



When you build a compound search condition, MSDSpro evaluates the conditions in the order in which they appear in the *Criteria area* (i.e. from top to bottom).

There is no precedence among the conjunctions. Thus, if you have used more than two simple queries in building the compound query, the order in which you enter the simple queries can affect the results of the query.

As you build a compound query, you can modify existing parts of the query by clicking the line you want to change and clicking a new field or operator or typing a new value.

You can remove a simple query by selecting the line and clicking **DEL LINE**. In a compound query, you can remove one line of the query by clicking the **DEL LINE** button.

6. To save the query to disk file, click SAVE and enter a filename in the *Create File* window.

You do not need to save your query to perform the search.

7. Click QUERY to search the entire table, or Query in Selection to restrict the query to the current selection.

Or, click **CANCEL** to close the *Query editor*.

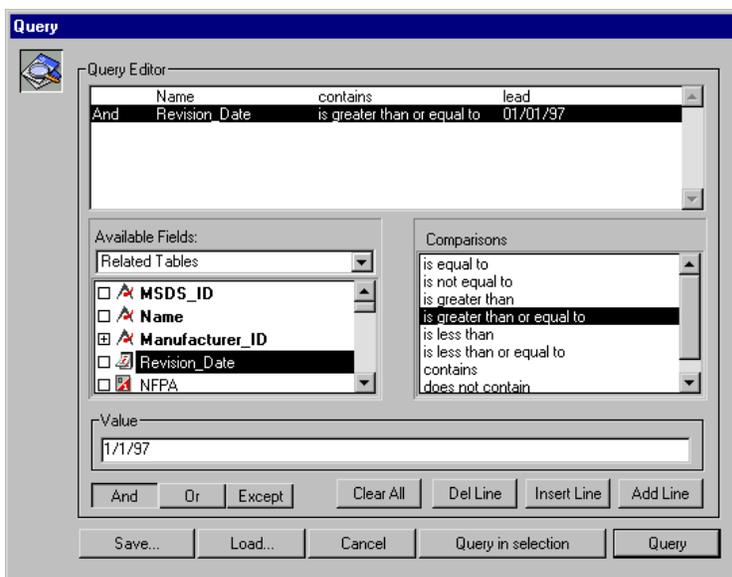
The Query Editor (Cont'd)

You can use the *Query editor* to search on related tables. If the field you want to search on is in a related table, click on the plus sign to the left of the appropriate field name to display all the fields available from the related table. The following illustration shows available fields from the related table, Manufacturer.

To select a field from another table:

1. **Expand the related table fields by clicking the plus sign.**

The fields belonging to the related table appear in the hierarchical list.



2. **Click to the desired field in the related table.**
3. **Follow the steps 3 through 7 for directions on creating the rest of the query.**

To save a query to disk:

1. **Click the SAVE button.**
2. **Click OK.**

The query is saved to disk. Simply load it next time to use the same query again.

To load a saved query from disk:

1. **Click LOAD and select the desired file.**

Advanced Search

Clicking on the **SEARCH** button along the bottom of the *Product Output* form loads the *Advanced Search Editor*. The *Advanced Search Editor* is similar to *The Query Editor*. However, while *The Query Editor* only has the ability to search tables linked directly to the table from which the search is being conducted, the *Advanced Search Editor* has the ability to search fields in tables with only an indirect association to the Product table.

To query using the Advanced Search Editor:

1. Click on the **SEARCH** button along the bottom of the *Product Output* form OR choose **Search for Records** after selecting **Products** from the **Admin Control Panel**.
2. Select **Master Table** from the **Available Fields** pull-down menu if the information to be searched for is located in the product table, otherwise select **Other Tables**.
3. Highlight the field name that contains the information to be searched for, clicking on the plus or minus signs to show and hide fields as necessary.
4. Select the appropriate comparison operator to determine how the information to be searched for should compare to the data in the value field.
5. Enter into the value field the data to be compared to the information contained in the highlighted field.
6. Click on the **AND**, **OR**, or **EXCEPT** button(s) to combine the search on the current field with a search on another field or fields.

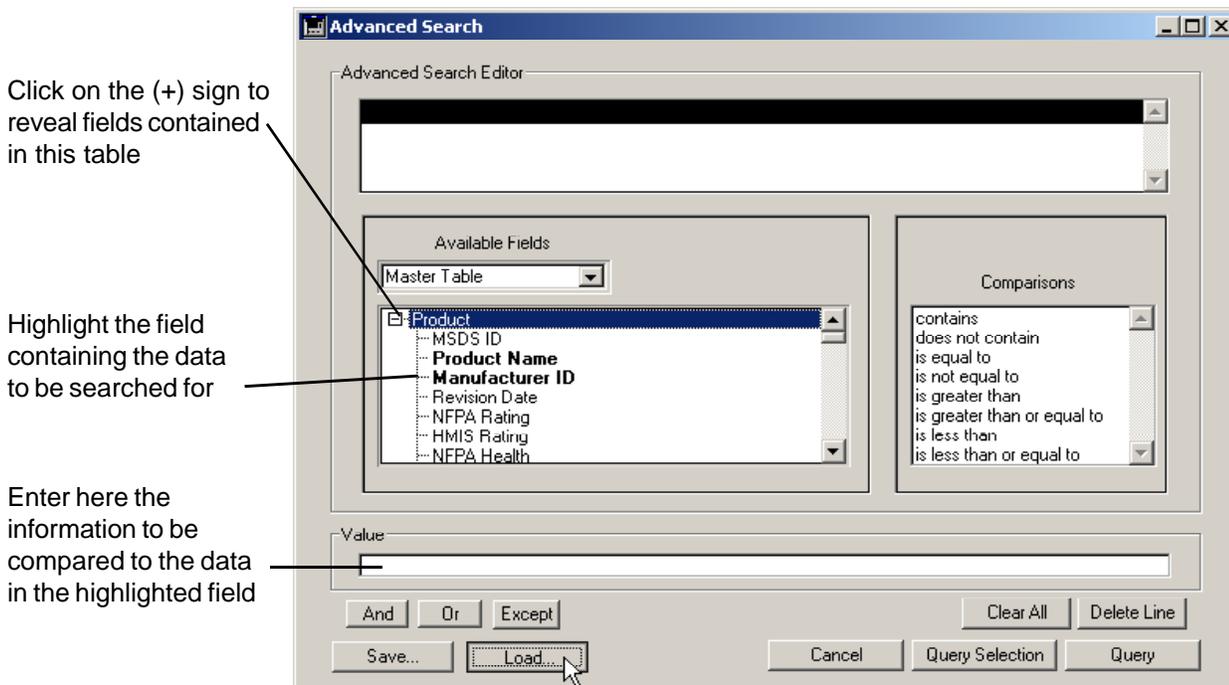
Click on the (+) sign to reveal fields contained in this table.

Highlight the field containing the data to be searched.

Enter here the information to be compared to the data in the highlighted field.

The screenshot shows the 'Advanced Search Editor' window. At the top, there are two search criteria: '[Chemical]Chemical Name contains gas and' and '[Company]Company Name contains MSDSpro'. Below this is a section for 'Available Fields' with a dropdown menu set to 'Other Tables'. A tree view shows fields like NPRI, DSL, Container, Inventory, Location, Company, Company Name (highlighted), and Address. To the right is a 'Comparisons' dropdown menu with 'contains' selected. At the bottom, there is a 'Value' field containing 'MSDSpro', and buttons for 'And', 'Or', 'Except', 'Clear All', 'Delete Line', 'Save...', 'Load...', 'Cancel', 'Query Selection', and 'Query'.

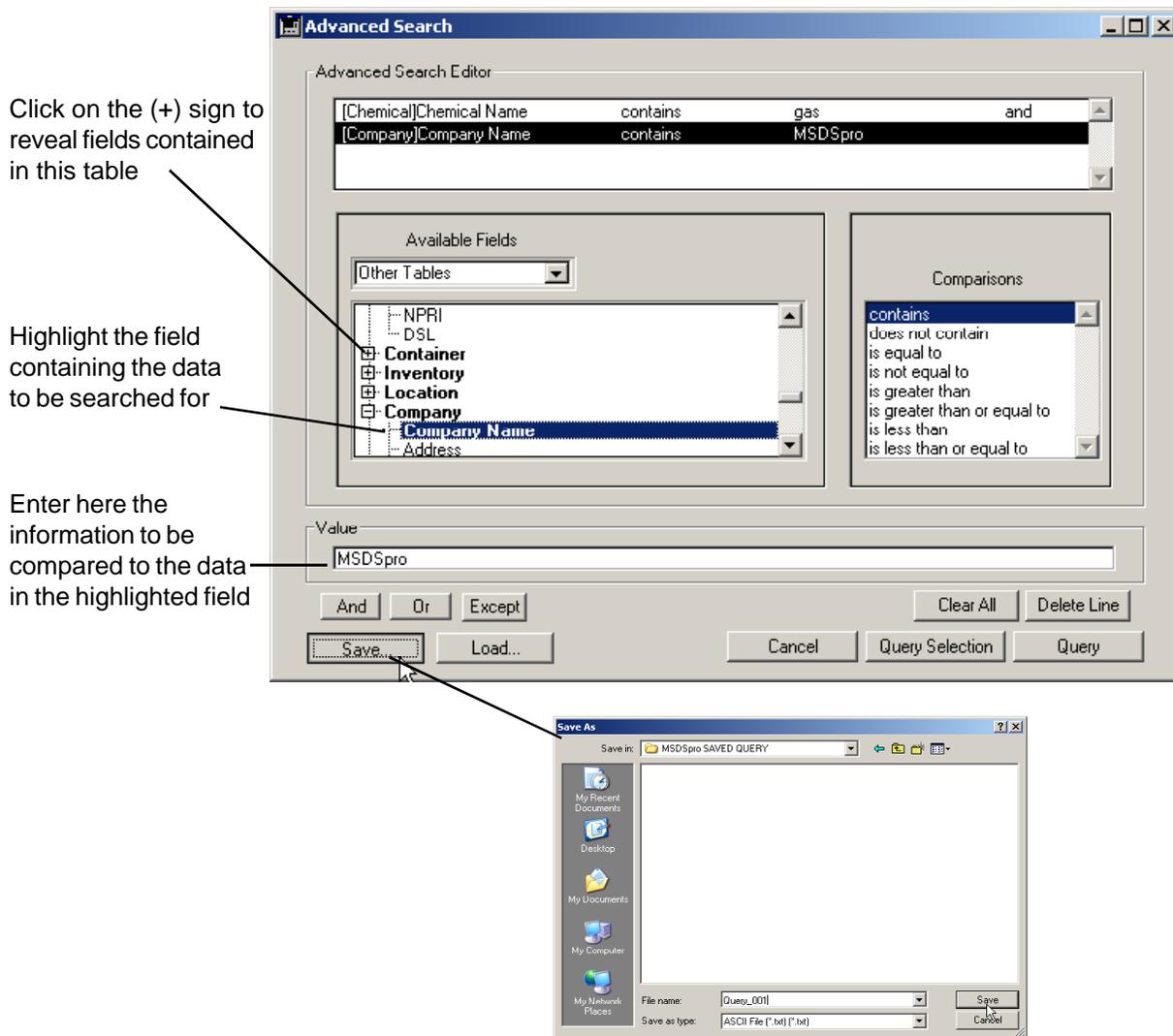
Advanced Search (cont'd)



- **ADD, OR, EXCEPT** add additional Lines for searches with multiple criteria.
- **CANCEL** button to cancel the query.
- **CLEAR ALL** button to remove all information from the Search Criteria area.
- **DELETE LINE** button to remove the highlighted line from the Search Criteria area.
- **QUERY** button to execute the query.
- **SAVE** Allows you to save Search criteria to a file.
- **LOAD** button allows you to load a previously saved search.

Advanced Search (cont'd)

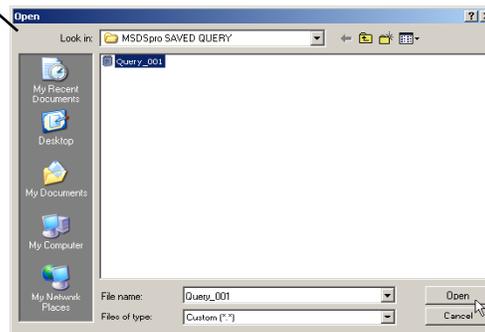
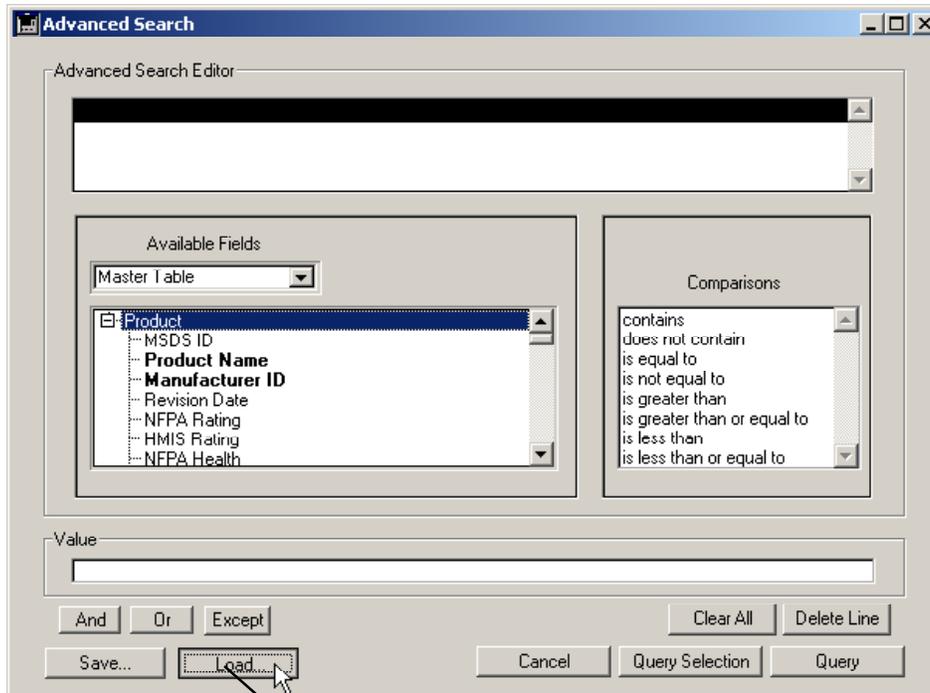
Save and Load Searches : SAVING YOUR ADVANCED SEARCH



- Build your query using steps listed on 3-13.
- Click on the Click the SAVE button.
- Select the path and file name.
- Press SAVE.

Advanced Search (cont'd):

Save and Load Searches: LOADING YOUR ADVANCED SEARCH



- Click on the LOAD button.
- Select The Query that you want to run.
- Press OPEN.

Sorting Records

A *sort* reorders records according to the values in the table. It is common to sort records to view records on screen in a particular order, or before printing a report or exporting data.

As you enter data into the database, MSDSpro stores the records in the order in which they are entered or imported. When you list records in an output form or print records, they appear in this order. Often, you want to view records in another order. For example, you might want to alphabetize a list of Product Names in a report - a sort on the Product Name field reorders the records alphabetically by Product Name.

MSDSpro conducts indexed sorts very quickly. If you are sorting on only one field and that field is indexed, MSDSpro uses the index.

You can sort records on up to 30 different fields or formulas. Each field or formula you sort on is referred to as a *sort level*. For example, the results of a two-level ascending sort on the Product Revision Date and Name would product a list such as this:

```
04/22/91, Acetone
04/22/91, Crude Oil
.
.
09/25/98, Acetylene
09/25/98, Green Stuff Absorbent
```

When sorting the contents of fields, MSDSpro is not case sensitive.

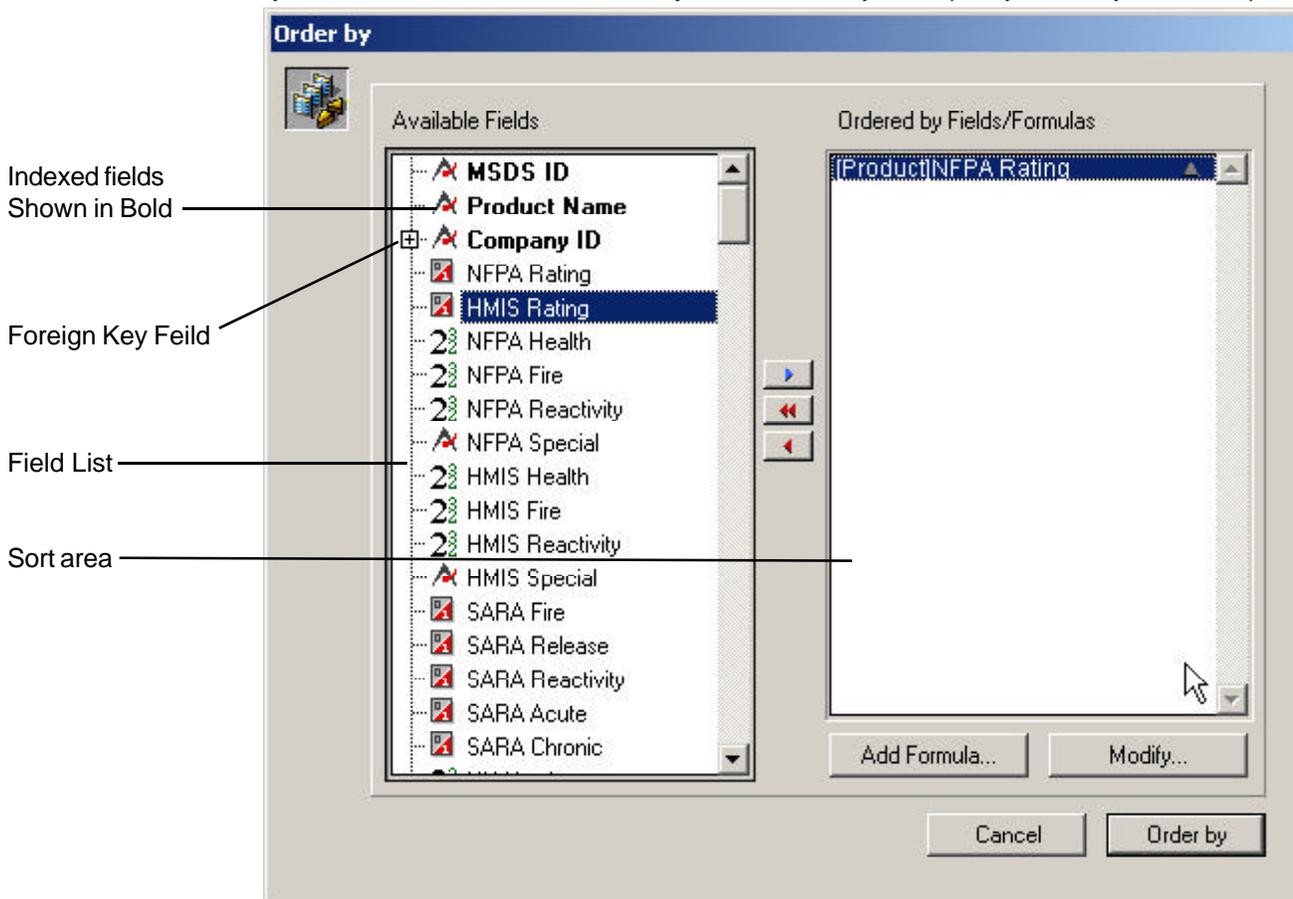
You can specify either an ascending or descending order for each field or formula that you are sorting on. Sorting from A to Z or smallest to largest is known as an *ascending* sort. Sorting in the reverse order is called a *descending* sort - largest to smallest, latest to earliest, and Z to A.

If you are sorting on more than one level, you can freely mix ascending and descending sort orders. A multiple-level sort can mix fields and formulas and ascending and descending sort orders.

The Order By Editor

You use the *Sort Editor* item in the *Selection menu* to sort the records in the current selection. Sorting the current selection changes the order in which records are displayed or printed. This is a temporary sort; it does not affect the order in which the records are stored on disk.

When you choose *Sort Editor*, the *Order By editor* enables you to specify the sort you want to perform.



- **Fields list:** This area displays a list of fields in the current table. Indexed fields are shown in boldface. You can sort on fields from related tables. To use a field from a related table, click on the plus sign to display the fields from the related table.
- **Sort area:** The Sort area displays the sort fields or sort formulas and the direction of each sort. The arrows on the right of this area are used to specify an ascending or descending sort.
- **ADD FORMULA button:** The ADD FORMULA button to write a formula as one of the sort criteria.
- **Button panel:** The Button Panel has buttons for adding or removing fields from the sort list.
- **MODIFY button:** The MODIFY button displays the selected sort criterion in the Formula editor. If the selected criterion is a formula, the formula is presented for editing. If the criterion is a field, the field name appears in the editing window of the Formula editor.

Sorting a Selection

You select *Sort Editor* from the *Selection menu*, or click **Sort** in any *Output form* to sort the records in the current selection. Sorting the current selection changes the order in which records are displayed or printed. This is a temporary sort; it does not affect the order in which the records are stored on disk.

When you select *Sort Editor*, the *Order By editor* appears, allowing you to specify the sort to perform.



Use the *Sort Editor* menu item to sort the current selection of records. This sort is temporary and applies only to the current selection; it does not affect the order in which records are stored in the database. Sorting is commonly used immediately after a query and before printing a report.

To sort the current selection:

1. **Choose *Sort Editor* from the *Selection menu*.**
2. **Double-click the name of a field on which you want to sort, or drag the field name from the Fields list to the Sort area, or to sort on a formula, click the **ADD FORMULA** button.**

When you open the *Order By editor*, the Fields list displays the fields from the master table. You can choose fields from related tables by expanding a foreign key field.

If you clicked the **ADD FORMULA** button, MSDSpro displays the *Formula editor*. For information on writing a formula, see *The Formula Editor* later in this section.

The field name or formula appears with a sort direction arrow in the Criteria area.

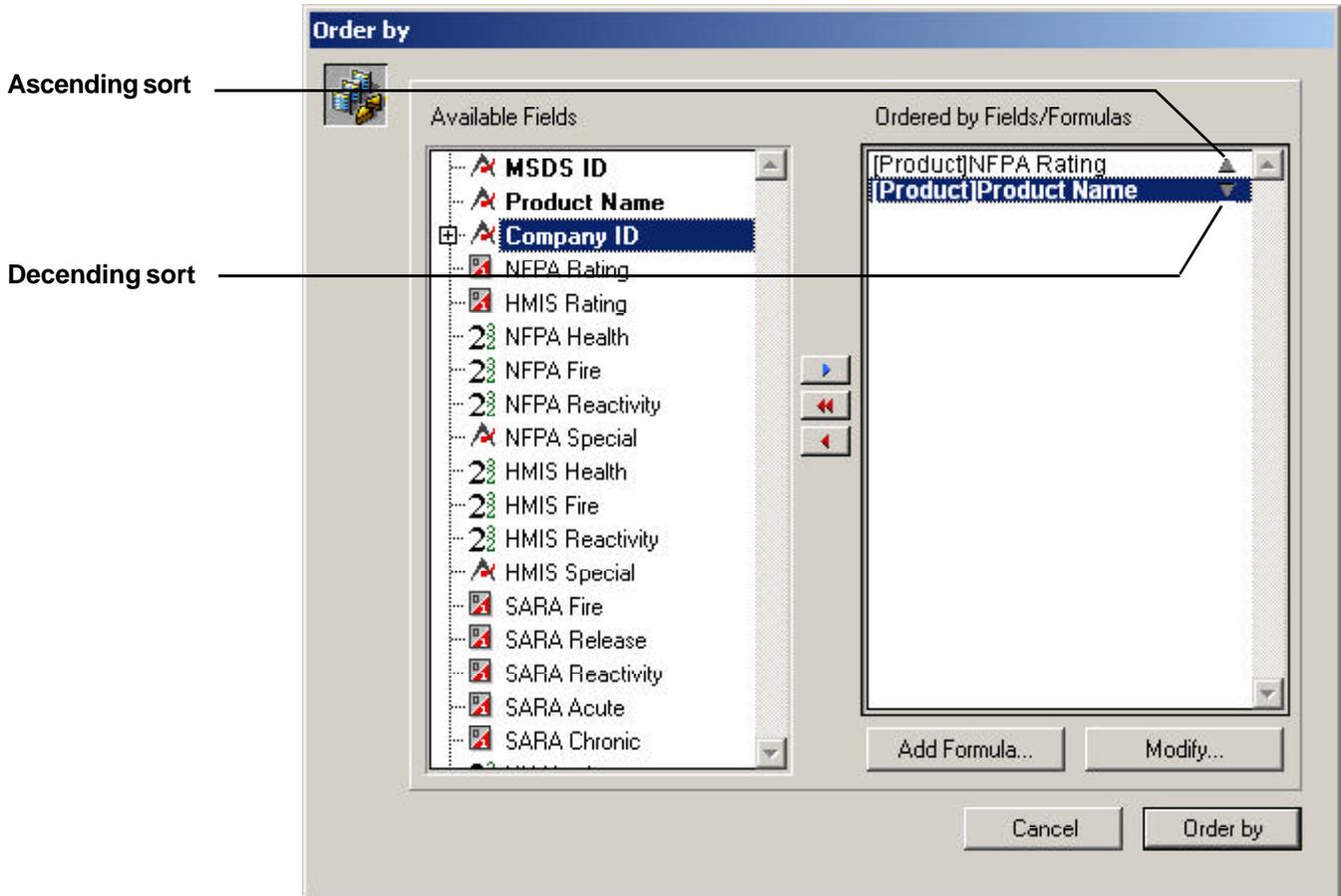
3. **If necessary, click the sort direction arrow in the Sort area to switch between ascending and descending sort order.**

Up is ascending; down is descending.

4. **If necessary, repeat steps 2 and 3 to add secondary sort levels to the list.**

For each sort level, you can specify ascending or descending order.

Sorting a Selection (Cont'd)



FOR EXAMPLE: The sort order shown lists Products sorted by date, then by Product name.

5. Click on the ORDER BY button.

MSDSpro sorts the current selection.

Quick Reports (Ad-Hoc Reports)

One of the most important tasks in data management is the generation of reports. Frequently used “built-in” reports are accessed from the *Reports Control Panel*. However, for ad-hoc reporting capabilities, you can use the *Quick Report editor* to create a wide variety of columnar reports.

Using the *Quick Report editor* you can do the following:

- Produce lists of records
- Create break areas between groups of sorted records
- Compute summary calculations
- Use fonts and styles in the report

The *Quick Report editor* produces reports from the current selection of records. Before you print a report, you must select the records you want to include in your report (usually by performing a search from the *Selection menu* in an *Output form*.)

MSDSpro’s *Quick Report editor* lets you create and print tabular reports. Output from a typical Quick Report is shown below:

Equip_Location	Name	Start_Date	
ALL UNITS	MULTIFAK AFB 2 (00940)	1/1/80	
	Subtotal for ALL UNITS:		1
BOHO	ACTIVATED ALUMINAS	8/1/96	
	ADVANTAGE PLUS 1050 DEPOSIT	1/6/97	
	INHIBITOR		
	Subtotal for BOHO:		2
COOLING TOWERS (ALL)	DREWSPERSE 2675 ANTISCALANT	1/20/97	
	Subtotal for COOLING TOWERS (ALL):		1
CPD	ATTACK	1/8/97	
	CHARCOAL, ACTIVATED	11/5/96	
	DOCTORS SOLUTION	11/20/96	
	ORTHO-TOLIDINE SOLUTION	10/1/96	
	Subtotal for CPD:		4
CRU-3	SULFRZOL 40	5/24/95	
	UOP R-56 CATALYST	9/1/96	
	UOP R-56X CATALYST	9/1/96	
	Subtotal for CRU-3:		3

When you create a Quick Report, you can specify the following:

- Columns displaying fields or formulas, either from the current table or from related tables
- Sort levels and order
- Break levels
- Summary calculations
- Text for labels
- Formats for numeric and Boolean data
- Font, font size, style, and justification for labels, summary calculations, and data
- Page headers and footers

Quick Reports (Ad-Hoc Reports) (Cont'd)

A Quick Report can be printed/output to:

- A Printer
- A Disk File
- A Graph

These options are discussed in *Selecting an Output Device* later in this section.

Creating a New Quick Report

The *Quick Report editor* lets you create reports in the User environment. To create a Quick Report design, choose *Report Editor* from the *Selection menu* on any *Output form*. MSDSpro displays the *Quick Report editor*. If an existing design is displayed, choose *New* from the *File menu* to begin a new Quick Report design.

Loading and Saving a Quick Report Design

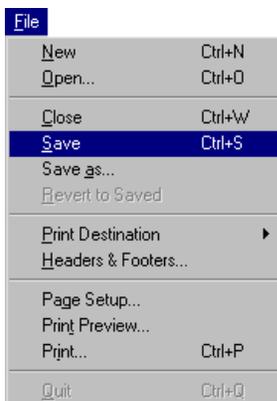
You can save a Quick Report design as a file that you can open from the *Quick Report editor*. The Quick Report design includes all your specifications, but not the data. By saving report designs, you can maintain a library of Quick Reports that you can use depending on your needs.

NOTE: *If you do not save your design, it will not be displayed the next time you open the Quick Report editor.*

To save a Quick Report design, follow these steps:

1. Choose **Save** from the *File menu*.

MSDSpro displays a *Save File* window.



Quick Reports (Ad-Hoc Reports) (Cont'd)

2. Enter a filename for the Quick Report and click on the SAVE button.

MSDSpro saves the report as a file that you can open with the *Quick Report editor*. You can save the file to any hard disk available to you.

NOTE: If you are saving a report previously saved or loaded, it replaces the previous report.

Loading a Quick Report Design

When the *Quick Report editor* is open, you can load a saved design and use it to print a new report. The same Quick Report design can be used repeatedly to print different selections of records.

To load a report design:

1. Choose **Open** from the **File menu**.

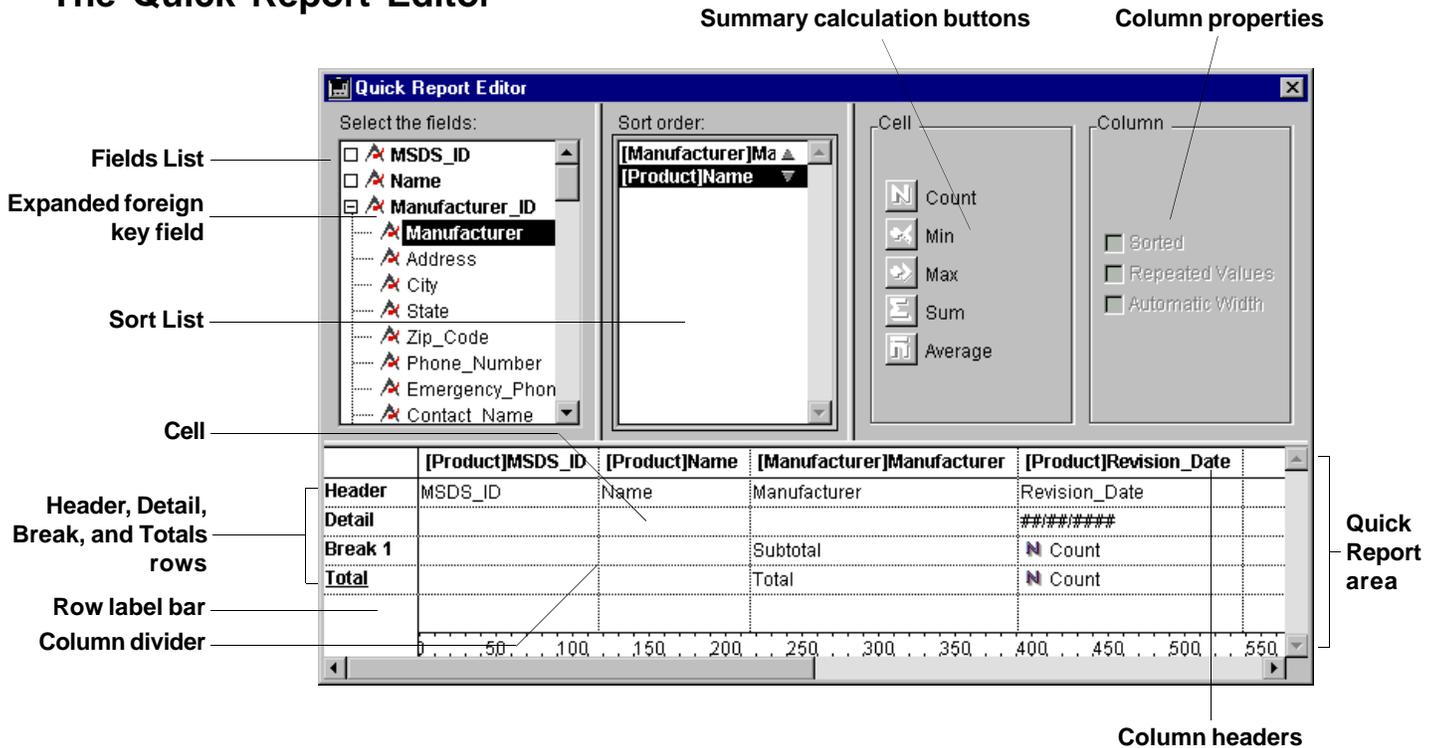
MSDSpro displays an *Open File* window displaying a list of available quick report designs.



2. Select a file from the list and click **OPEN**.

MSDSpro replaces the current report design with the design you opened.

The Quick Report Editor



The *Quick Report editor* contains the following elements:

- **Fields list:** This list displays fields in the current table. You can view the names of fields in other tables by expanding the foreign key fields. A foreign key field has a plus sign to its left.
- **Sort list:** This list displays the sort order assigned to the report and indicates whether each sort level is ascending or descending. If your report will contain summary calculations from groups of records, you must sort the current selection on one or more fields. You can change the order of fields in the Sort list by dragging the field name vertically to the desired position in the list.
- **Quick Report area:** You use this area to design the report by dragging fields, adding formulas, adjusting column widths, and adding or deleting breaks.
- **Summary calculation buttons:** You use these buttons to place summary calculations in the Break and Total areas of the report.
- **Column properties:** You use these check boxes to set the following characteristics for each column in the report:
 - **Sorted:** Click this check box if you want the records to be sorted on the selected column.

The Quick Report Editor (Cont'd)

- **Repeated Values:** Use this check box to tell the *Quick Report editor* to repeat the values in a Break column. If you do not select the Repeated Values check box, each Break value is displayed only once.
- **Automatic Width:** Click this check box to request that the *Quick Report editor* calculate the column width of the selected column based on the maximum length of the contents of the column. The sizing is done only at the time the report is printed. This option can be checked for each column individually. The check box does not refer to the entire report. If the Auto Column Width check box is not checked for a column, you can modify that column's width by dragging column indicators, and your reports may print much faster.
- **Column Dividers:** These lines indicate the boundaries between columns of the report.
- **Right margin marker:** This marker indicates the right margin of the report. The right margin marker is meaningful only when no columns have the Auto Column Width check box selected. You may have to scroll horizontally to view the right margin marker.
- **Column header:** The column header displays names of fields or formulas in the report.
- **Row label bar:** This bar shows the different areas of the report: the Header, Detail, Break, and Total rows.
- **Header row:** This row contains information that appears in the printed report above the records. The Quick Report editor automatically places field names in the Header row, but you can modify its contents.
- **Detail row:** This row prints information from individual records and will be repeated in the printed report for each break.
- **Break and Totals rows:** These rows display summary calculations and any associated labeling. The Break row displays summary calculations for each group of sorted records in the report and the Totals row displays summary calculations obtained from all records in the current selection.
- **Cells:** Cells are the intersection of a row and a column.
- **Scroll bars:** You use the scroll bars to view parts of the quick report design that extend beyond the area of the quick report form.

The Quick Report Editor (Cont'd)

The various list and display areas in the *Quick Report editor* can be resized. Areas that can be resized are bordered by a raised line.

The Quick Report *Pop-up Menus*

The *Quick Report editor* has “hidden” *pop-up menus* that make it easy to access certain row, column, and cell operations. Instead of making menu selections or working with the Cell or Column properties areas, you can perform certain operations by displaying a *Quick Report pop-up menu*. There are separate *pop-up menus* for row, column, and cell operations.

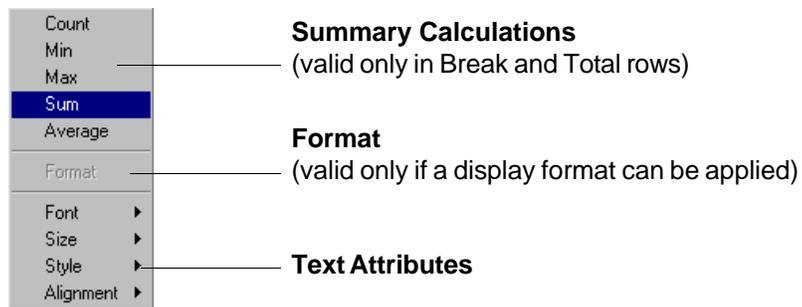
To use a *pop-up menu*:

1. **Position the pointer in a cell, a row label, or a column heading and hold down the right mouse button.**

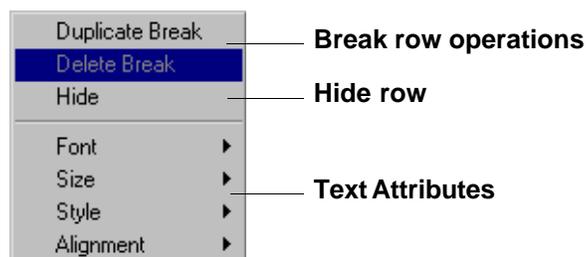
A *pop-up menu* appears. The commands in the *pop-up menu* depend on where your pointer is (i.e., a row label, column heading, or cell). Also, menu commands that are inappropriate for the particular row, column, or cell are disabled.

The three *Quick Report pop-up menus* consist of:

■ Cells

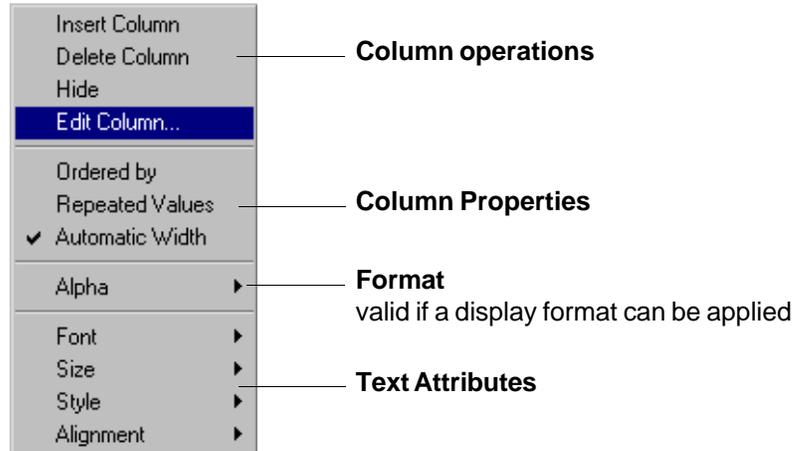


■ Rows



The Quick Report Editor (Cont'd)

■ Columns



2. Choose the desired menu command.

Selecting Rows, Columns, and Cells

When designing a Quick Report, you need to select rows, columns, and cells in the Quick Report layout. A cell is the intersection of a row and a column.

To select a row:

1. Click on the H, D, B, or T markers on the row label bar to the left of the Quick Report layout. Or, click in a row to the right of all columns in the Quick Report layout.

To select a column:

1. Click above the Header row of a column.

To select a cell:

1. Click the cell.

The Quick Report Editor (Cont'd)

Adding and Modifying Text

You can add or modify text in the Quick Report layout. Text can be used to label parts of the report. For example, if you requested summary calculations, you can add text to other cells in the Break and Total rows to label the summary calculations.

You can do the following:

- **Edit the text that MSDSpro automatically adds to the Header row of the report**
- **Insert text in empty cells of the Break and Totals rows**
- **Insert the value of a Break field in the Break rows**
- **Specify the font, font size, justification, and style for any text that appears in the report**

To add text:

1. **Click twice on an empty cell in the Quick Report layout.**

A text insertion point appears in the cell. If you are entering a label for a summary calculation, select a cell in the same row as the cell containing the calculation icons. You cannot enter text into the same cell that contains summary calculations.

2. **Type the text in the cell.**

To modify text:

1. **Drag across the text in the cell to modify. MSDSpro highlights the selected text.**
2. **Type the new text in the cell.**

Specifying Font, Font Size, Justification, and Style

While designing your Quick Report, you can specify different fonts, font sizes, justification, and styles. You can apply these specifications to rows, columns, or cells in the Quick Report. These specifications can be applied to text, data, and summary calculations.

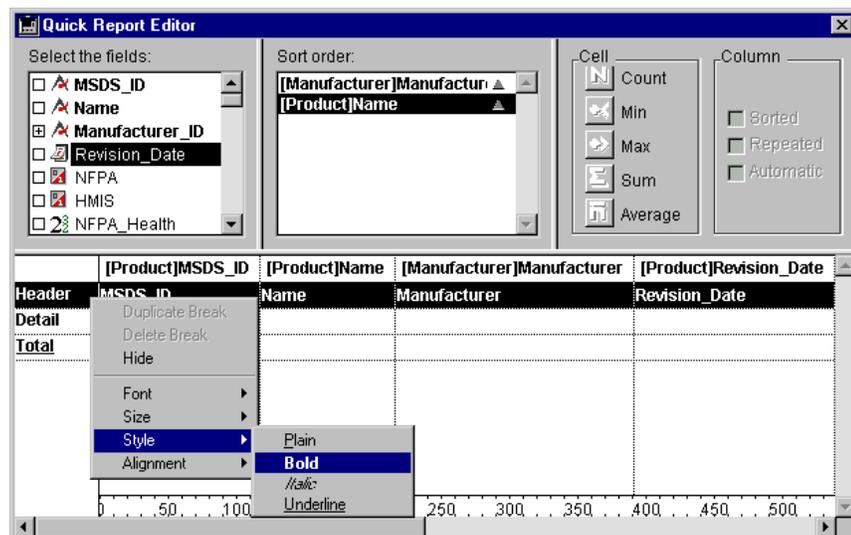
If you assign specifications to the Detail row of the report, you will not see the results until you preview or print the report.

The Quick Report Editor (Cont'd)

To specify a font, font size, style, or justification:

1. Select the column, row, or cell where you want to apply the font.
2. Choose a font from the *Font menu* or choose a font size, style, or justification from the *Style menu*, or hold down the right mouse button to display the Quick Report *pop-up menu* to select text attributes.

MSDSpro applies the font to text, data, and summary calculations in the selected area.



Adding Columns to the Report

You create columns by dragging field names from the Fields area to the Quick Report layout. You can add fields from related tables, provided the relationship exists. To add fields from related tables, click the plus sign on the Foreign key field to expand the list of available related fields.

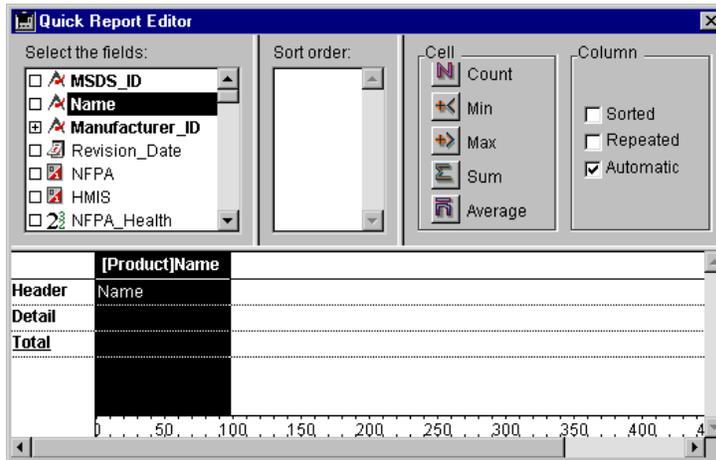
To add a column:

- Drag the name of a field to the right of existing columns in the Quick Report layout and release the mouse button.

MSDSpro creates a column for the field and places the field name in both the column header and the cell in the Header row.

The Quick Report Editor (Cont'd)

The figure below shows the Product Name field added as a column to the Quick Report layout:

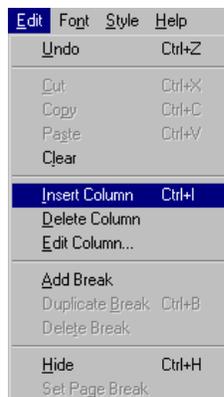


Inserting Columns

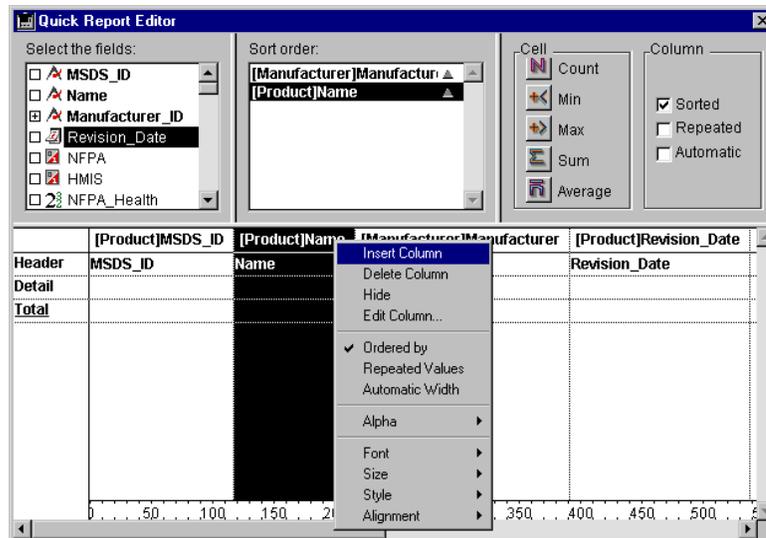
You can insert a column in a Quick Report.

To insert a column:

1. **Select a column.**
2. **Choose *Insert Column* from the *Edit* menu, or hold down the mouse button to display the Quick Report *pop-up* menu and choose *Insert Column*.**



The Quick Report Editor (Cont'd)



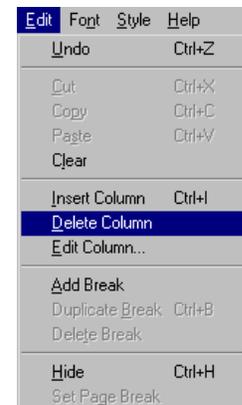
MSDSpro inserts a blank column to the left of the column you selected. You can then assign a field to the empty column by dragging a field name to it. Or, you can choose to assign a formula to the column. For information on assigning a formula to a column, see *Adding Formulas to the Report* later in this section.

Deleting Columns

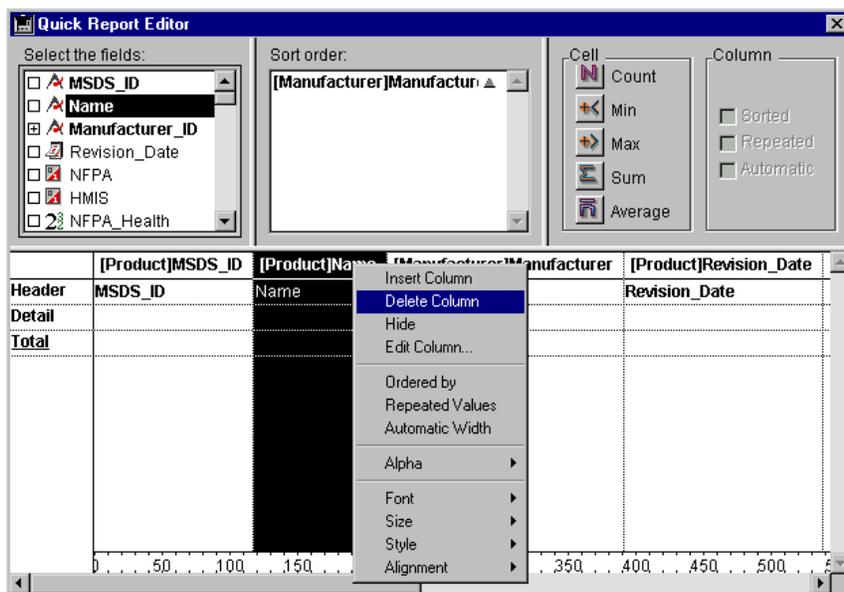
As you specify fields for your Quick Report, you may want to remove some columns so that they can be placed elsewhere. You also might want to delete the column from the report.

To delete a column:

1. **Select the column you want to delete.**
2. **Choose *Delete Column* from the *Edit* menu, or hold down the right mouse button to display the Quick Report *pop-up menu* and choose *Delete Column*.**



The Quick Report Editor (Cont'd)



MSDSpro removes the selected column from the Quick Report layout.

Replacing Columns

You can replace a column in the Quick Report by dragging another field over it. You can also replace a field with a formula.

To replace a column:

1. **Drag a field from the Fields area to the column you want to replace, or select the column you want to replace and choose *Edit Column* from the *Edit menu*.**

When you print the Quick Report, MSDSpro prints the results of the formula for each record that appears in the Detail row.

See *Adding Formulas to the Report* later in this section for information on adding a formula to a Quick Report.

Sizing Columns

By default, the *Quick Report editor* sizes columns automatically (as reflected in the Automatic Width check box). It sizes each column based on the maximum length of data displayed in the column and any labels typed into the column. The *Quick Report editor* sizes columns at the time the report is printed.

To view the widths of each column, preview the report to the screen. See *Printing the Quick Report* later in this section for more information about previewing the report.

The Quick Report Editor (Cont'd)

Because the Auto Column Width check box will change the width of a column based on the maximum width of data in the records being printed, selecting different records can change the size of the columns.

You can resize a column manually after turning off the Auto Column Width check box. When a column is set manually, text in the column wraps within the specified area. Print speed may also be much faster because the *Quick Report editor* will not have to calculate the maximum width of each record value being printed.

To resize a column manually:

1. **Select the column you want to resize.**
2. **Deselect the Auto Column Width check box either in the Column Properties or in the Quick Report *pop-up menu* for the column.**
3. **Move the pointer over the column indicator in the column header to change the pointer into a column width cursor.**
4. **Drag the column indicator to the left or right to size the column.**

Adding Formulas to a Quick Report

You can add a formula to a column in a Quick Report. For example, you can add a formula that calculates Inventory quantities from a quantity field.

To add a formula:

1. **Insert an empty column or click an existing column and choose *Edit Column...* from the *Edit menu*, or hold down the mouse button to display the Quick Report *pop-up menu* and choose *Edit Column...***

MSDSpro displays the *Formula editor* where you can build a formula. If you selected an existing column, the formula you create will replace the previous contents of the column.

2. **Build the formula by clicking fields, keywords, and commands and entering values. To save the formula as a disk file that you can recall and use in another column or in another report, click the SAVE button and enter a filename in the *Save File window*.**

For more information on using the *Formula editor*, refer to *The Formula Editor* in *Database Conventions*.

The Quick Report Editor (Cont'd)

3. Click OK to assign the formula to the column.

MSDSpro adds a new label to the column that identifies it as a formula. You can relabel the column by typing a label into the header cell for that column. Formulas are labeled C1 through Cn. The labels are the names of variables that contain the column's value. You can use these variables in other formulas.

Sorting Records and Creating Breaks

An important feature of the *Quick Report editor* is the ability to sort the records in your report. You sort records for two reasons:

- To view records in a particular order.
- To create groups of records and Break areas in the report for the purpose of reporting summary calculations for groups.

See the section *Setting Break Levels* later in this section for information on summary calculations.

Specifying a Sort Order

After you specify the columns for your report, you can specify a sort order. You set a sort order by selecting the column to sort, and then set the Sorted property. For example, if you wanted to sort the records of Inventory by the Storage_Location field, you would select the Sorted property for the Storage_Location column.

You can also sort on a formula by selecting the column that contains the formula and then clicking the Sorted check box or choosing *Sorted* from the Quick Report *pop-up menu* for that column. See *Adding Formulas to the Report* earlier in this section for more information on adding formulas to Quick Reports.

To specify the sort order using the Sorted check box:

1. Select the column that contains the field or formula you want to specify as the first sort level.
2. Click the Sorted check box.

To specify the sort order by dragging:

1. Drag a field from the Fields list to the Sort Order list.

If the field is not already in the Quick Report design, MSDSpro adds it as the last field in the design.

The Quick Report Editor (Cont'd)

To specify a sort order using the Quick Report *pop-up menu*:

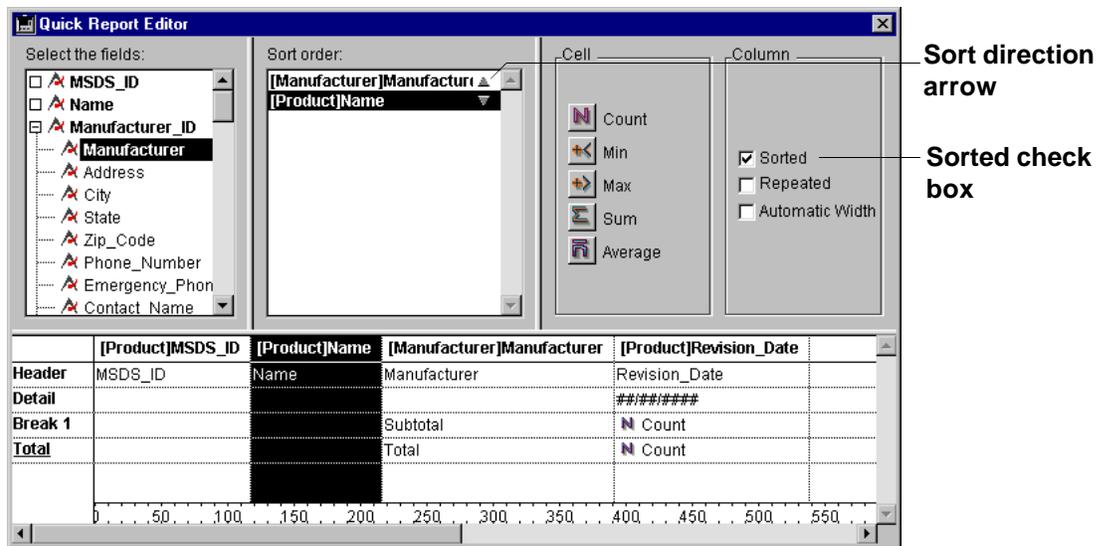
1. Hold down the right mouse button on the column header belonging to the column to sort.

The Quick Report *pop-up menu* appears.

2. Choose **Sorted** from the *pop-up menu*.

MSDSpro displays the name of the field in the Sort list. To the right of the name is an arrow, indicating an ascending sort order. By default, all sorts are performed in ascending sort order.

3. If necessary, click the sort direction arrow to sort the column in descending order.



4. If desired, select additional fields or formula columns and add the **Sorted** property using either the **Sorted** check box or *pop-up menu* command.

You can specify ascending or descending sort order for any additional fields or formulas you specify.

When you specify multiple sort levels, MSDSpro sorts the records on the first field in the Sort field list, then on other fields in the order that they appear in the list. For example, if you specify the Manufacturer field as the primary sort field and Product Name as the secondary sort field, your design might look like the Quick Report design shown above.

The Quick Report Editor (Cont'd)

To change the level of a Sort field:

1. **Drag the name of a field or formula up or down within the sort list to the desired sort level.**

You can delete any field or formula from the Sort list.

To delete a field or formula from the sort order:

1. **Select the column and deselect the Sorted check box, or hold down the right mouse button on the column header to display the Quick Report *pop-up menu* and deselect the *Sorted* menu command.**

MSDSpro removes the field or formula in the Sort field list. It does not delete the column itself from the report. When you print the report, MSDSpro will no longer use that field or formula to sort the records.

Setting Break Levels

In a Quick Report, you set Break levels to separate or “break” records into groups according to values in one or more sort fields. A Break area is printed at each break level. You can print summary calculations in the Break area. The summary calculations - sum, average, minimum, maximum, and count - are calculated for each group of records.

Break levels are determined by the sort levels and Break rows. For example, if you tell MSDSpro to sort records by Storage_Location and create a Break row, MSDSpro inserts a break between each group of records that have the same Storage_Location.

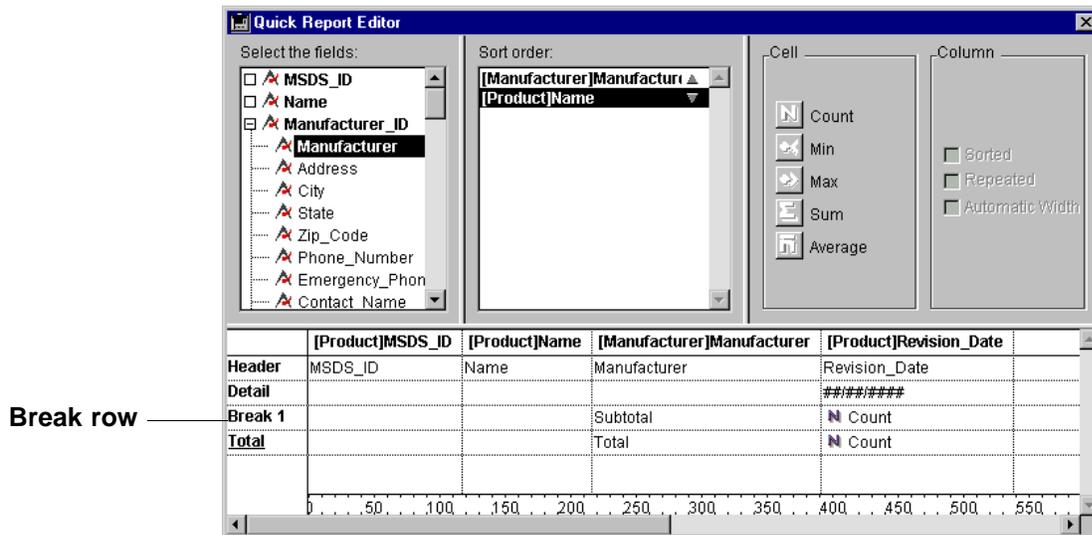
After you add a Break row to the Quick Report, you can request summary calculations on each break. For example, you can insert a summary calculation in a Break row to display Count subtotals for each Storage_Location. Refer to “Adding Summary Calculations” later in this chapter for more information on adding summary calculations to Break and Total rows.

To insert a Break row:

1. **Choose *Add Break* from the *Edit menu*, or hold down the right mouse button on the Total row label in the Row label bar and choose the *Duplicate Break* menu command.**

The Quick Report Editor (Cont'd)

MSDSpro adds a Break row. The figure shows a Break row in a quick report design:



2. If desired, add additional Break rows by repeating step 1.

There should be at least as many sort levels as Break levels.

MSDSpro adds a sequential number to each new Break label in the row label bar, for example, Break1, Break2, Break3, and so forth.

Using the Values of Break Fields in Labels

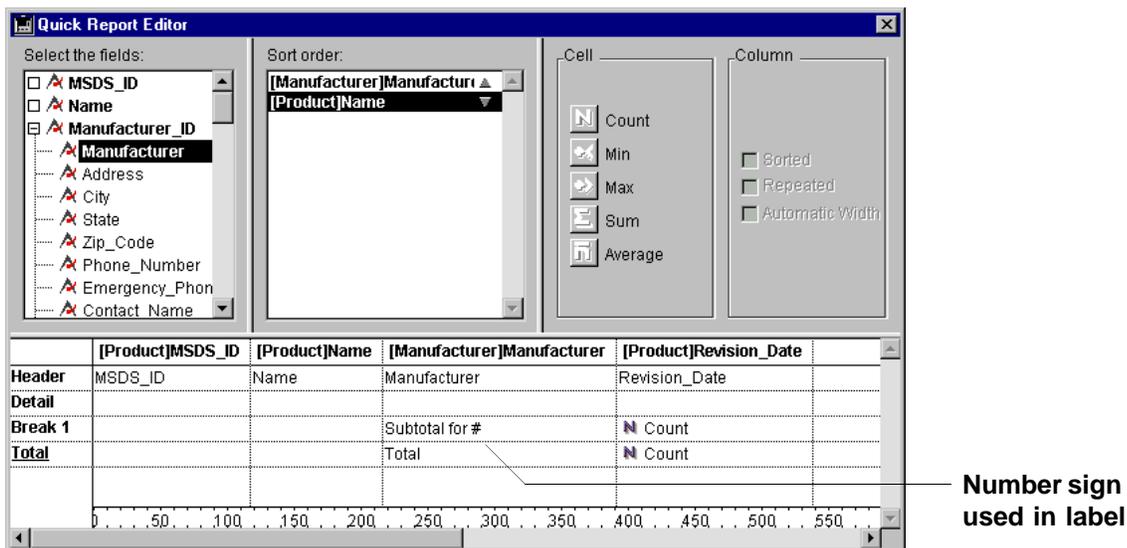
You can improve the appearance and comprehensibility of your reports by labeling each Break row using the value of the Break field.

To request that the value of a Break field be printed in a label placed in the Break area, use the number sign (#) in the label. For example, the text "Subtotal for #" will insert the Storage_Location (in this case, the value of the Storage_Location field) in place of the number sign when the report is printed.

The number sign does not need to be placed in the same column as the Break field. It will display the value of the Break field in any cell in the Break row.

The Quick Report Editor (Cont'd)

The figure below illustrates the use of the number sign in a label in the Break row:



Adding Summary Calculations

Summary calculations on the contents of fields and formulas can be added to each Break row and to the Totals row.

The check boxes in the Cell area of the *Quick Report editor* identify the summary calculation options available for quick reports. The following types of summary calculations are available.

- **Sum:** Totals the values in the report or Break.
- **Minimum:** Displays the lowest value in the report or Break.
- **Maximum:** Displays the highest value in the report or Break.
- **Average:** Calculates the average of the values in the report or Break.
- **Count:** Calculates the number of records in the report or Break.

These options also appear in the Quick Report *pop-up menu* for cells in the Break and Total rows.

When you place a summary calculation in the Totals row, the calculation is done for all records in the report. If you place the summary calculation in a Break row, the calculation is done for the records in the Break.

The Quick Report Editor (Cont'd)

To add a summary calculation:

1. **Select a cell in a Break row or in the Totals row where you want to insert the summary calculation.**

The Sum, Minimum, Maximum, and Average calculations work only on a numeric field or formula.

2. **Click as many summary calculation check boxes as you like, or hold down the mouse button and choose the desired summary calculations from the Quick Report *pop-up menu* for cells.**

MSDSpro displays a calculation icon in the selected cell for each type of summary calculation you request. The figure below shows a Count icon in the Break 1 and Total rows.

The screenshot shows the 'Quick Report Editor' window. On the left, a tree view under 'Select the fields:' shows 'Manufacturer' selected. The 'Sort order:' list contains '[Manufacturer]Manufacturer' and '[Product]Name'. On the right, a 'Cell' panel shows 'Count' selected. The main table has columns: [Product]MSDS_ID, [Product]Name, [Manufacturer]Manufacturer, and [Product]Revision_Date. The table rows are: Header, Detail, Break 1, and Total. In the Break 1 and Total rows, the [Product]Revision_Date cell contains a 'Count' icon. A text label 'Calculation icons in Break and Total rows' points to these cells.

	[Product]MSDS_ID	[Product]Name	[Manufacturer]Manufacturer	[Product]Revision_Date
Header	MSDS_ID	Name	Manufacturer	Revision_Date
Detail				
Break 1			Subtotal for #	Count
Total			Total	Count

If you add more than one summary calculation to a cell, MSDSpro stacks the calculation icons on top of each other.

The Quick Report Editor (Cont'd)

Displaying Repeated Values for Break Columns

In a report with Breaks, the columns which are used to group records so that summary calculations can be done are called *Break columns*. In the report shown below, the *Storage_Location* field is a Break column since the records in the report are grouped by *Storage_Location*.

When a report like this is printed, the values for the Break column are printed only once per Break. In other words, a *Storage_Location* is printed only for the first record in the group and is not repeated until the *Storage_Location* changes.

Product Name	Storage_Location	Revision_Date	
3M BRAND TYPE 409 TONER (N-P)	Blue Room	6/19/91	Nonrepeating Break values
RED FLUORESCENT PAINT, 7201		9/2/87	
	Total for Blue Room		
ARMOR ALL PROTECTANT	Broom Closet	9/6/94	Nonrepeating Break values
SOAP & SCUM REMOVER		1/1/91	
	Total for Broom Closet		
ACETONE	Chemical Storage	4/5/94	Nonrepeating Break values
		4/5/94	
	Total for Chemical Storage		
FLOOR WAX - PARADE LIQUID	Cleaning Room	1/1/94	Nonrepeating Break values
	Total for Cleaning Room		

In some cases you may want to repeat the values for the Break columns so that they appear for every record in the Break area. To do so, select the Repeated Values column property. You can do so either by clicking the Repeated Values check box in the Column Properties area or by choosing the *Repeated Values* menu command in the Quick Reports *pop-up menu* for that column.

To display repeated values for fields in Break columns, follow these steps:

1. Select the Break column by clicking above the Header row for that column and click the Repeated Values check box, or hold down the mouse button on the Header row of the Break column and choose *Repeated Values* from the Quick Reports *pop-up menu*.

The figure shows the report at the top of this page after the Repeated Values check box has been checked for the *Storage_Location* column:

Product Name	Storage_Location	Revision_Date	
3M BRAND TYPE 409 TONER (N-P)	Blue Room	6/19/91	Nonrepeating Break values
RED FLUORESCENT PAINT, 7201	Blue Room	9/2/87	
	Total for Blue Room		
ARMOR ALL PROTECTANT	Broom Closet	9/6/94	Nonrepeating Break values
SOAP & SCUM REMOVER	Broom Closet	1/1/91	
	Total for Broom Closet		
ACETONE	Chemical Storage	4/5/94	Nonrepeating Break values
	Chemical Storage	4/5/94	
	Total for Chemical Storage		
FLOOR WAX - PARADE LIQUID	Cleaning Room	1/1/94	Nonrepeating Break values
	Total for Cleaning Room		

The Quick Report Editor (Cont'd)

Setting Display Formats

You can specify display formats for columns that contain Numeric, Alphanumeric, or Boolean data. For example, if you are displaying salaries in a column, you can add a numeric format to the Detail cell for the quantity field. If your report includes Alpha fields such as a telephone number or Social Security number, you can use an Alpha format. If your report displays values for a Boolean field such as true/false or yes/no, you can use a Boolean format.

This section explains how to use Numeric, Alpha, and Boolean formats. It then shows you how to specify a format for a particular field by entering the format into the Quick Report layout.

Numeric Formats

The following format places a dollar sign to the left of the number and allows up to 6 digits:

`$###,###`

This format can display dollar amounts up to \$999,999.

Alpha Formats

You can use an Alpha format for fields that contain string information. For example, social security number or telephone number fields can be formatted with an Alpha format.

The following format would be used to format Social Security numbers:

`###-##-####`

Boolean Formats

You can specify a Boolean format for fields that contain information which can be evaluated as either TRUE or FALSE or as only one of two values (e.g. Yes or No).

If you do not apply a display format to a Boolean field, the values are displayed as either TRUE or FALSE.

To substitute different values for TRUE and FALSE, separate the two values you want to display with a semicolon. The example below shows a display format for a field in an invoicing database.

`Paid;Unpaid`

Entering the Display Format for a field

To enter a display format for a Numeric, Alpha, or Boolean field:

1. **Click twice in the Detail cell for a Numeric, Alpha, or Boolean column.**

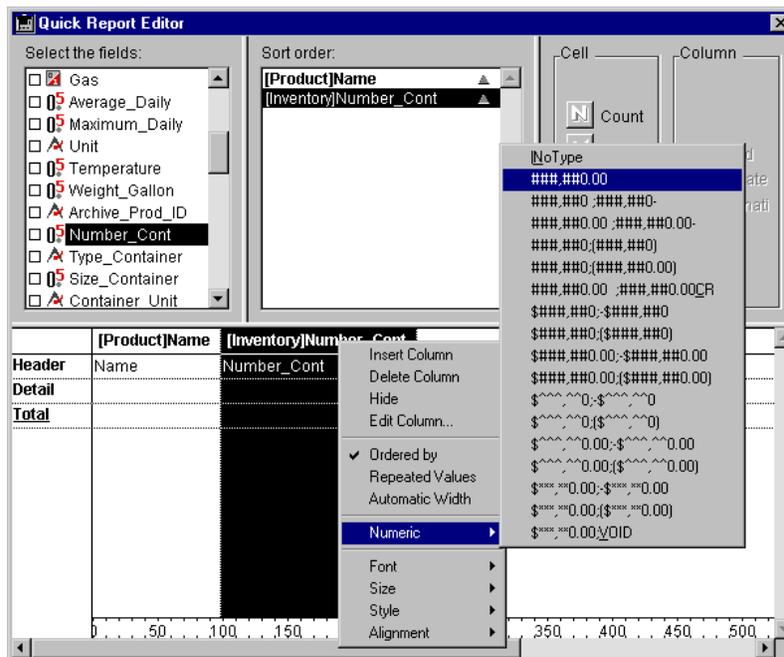
The Quick Report Editor (Cont'd)

2. Type a display format.

If you have also requested summary calculations for that column, the format specified in the Detail cell will automatically be applied to the summary calculations. The count is always displayed as an integer without formatting symbols such as the dollar sign. Different formats can be applied to different columns in the report.

To enter a display format from the Quick Report *pop-up menu*:

1. Position the pointer over the Detail cell for a column and hold down the right mouse button and choose a display format from the *hierarchical menu*.



The *hierarchical menu* will show display formats that are appropriate for the data type of the column. For example, if the field was an Alpha format, the menu command would be “Alpha” instead of “Numeric” and the submenu would list only Alpha formats.

After you make your selection, you can edit the format normally.

If you have also requested summary calculations for that column, the format specified in the Detail cell will automatically be applied to the summary calculations. Regardless of the display format, the count is always displayed as an integer without formatting symbols such as the dollar sign.

Different formats can be applied to different columns in the report.

The Quick Report Editor (Cont'd)

Hiding Rows and Columns

MSDSpro lets you hide rows or columns when printing a Quick Report. If desired, you can show a hidden column or row.

Hiding rows is useful, for example, when you want the report to include only summary calculations. For example, hide the Detail row if you want to display only the summary calculations that appear in the Totals and Break rows. You can also use this feature to hide a Break row or the Totals row.

You can hide a column if you need to use the column as a sort column, but do not want the report to display the column.

You can hide a row using either a Quick Report menu command or the Quick Reports *pop-up menu*.

To hide a row using the menu command:

1. **Select the row you want to hide.**
2. **Choose *Hide* from the *Edit menu*.**

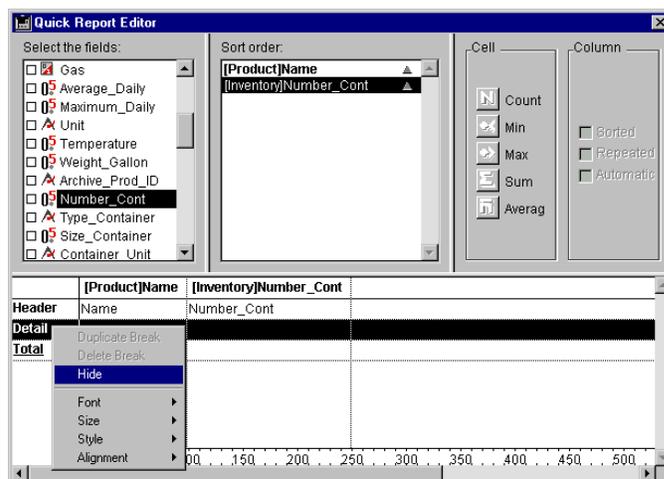
To hide a row using the *pop-up menu*:

1. **Hold down the right mouse button over the row label in the Row label bar.**

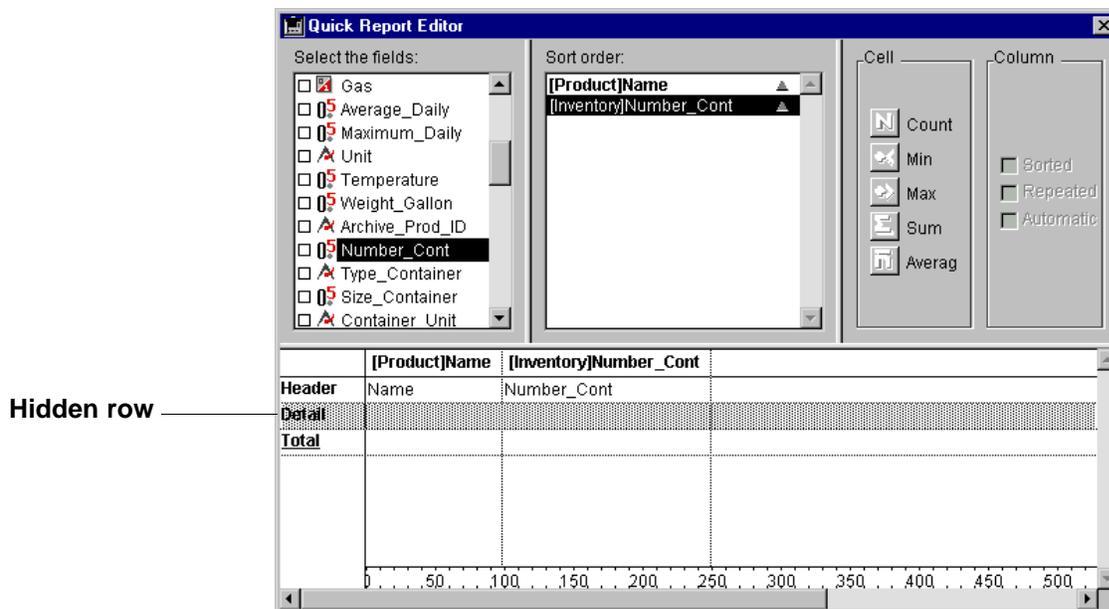
The Quick Reports *pop-up menu* appears.

2. **Choose *Hide* from the *pop-up menu*.**

MSDSpro displays the row in gray to remind you that the row will not appear when you print or preview the quick report.



The Quick Report Editor (Cont'd)



You can also use a menu command or the Quick Reports *pop-up menu* to hide a column.

To hide a column using the menu command:

1. **Select the column you want to hide.**
2. **Choose *Hide* from the *Edit menu*.**

To hide a column using the *pop-up menu*:

1. **Hold down the right mouse button over the column header.**

The Quick Reports *pop-up menu* appears.

2. **Choose *Hide* from the *pop-up menu*.**

MSDSpro displays the column in gray to remind you that the row will not appear when you print or preview the quick report.

Showing a Hidden Row or Column

When a row or column is hidden, the *Hide* menu command in the *Edit menu* and Quick Report pop-up menu becomes *Show*. You can display a hidden row or column choosing *Show* from either the *Edit* or *pop-up menu*. When you do so, the row or column is displayed normally in the Quick Report area.

The Quick Report Editor (Cont'd)

Adding Page Headers and Footers

Before printing a Quick Report, you can add page headers and footers. You specify page headers and footers in the *Headers and Footers* window. Use this dialog box to do the following:

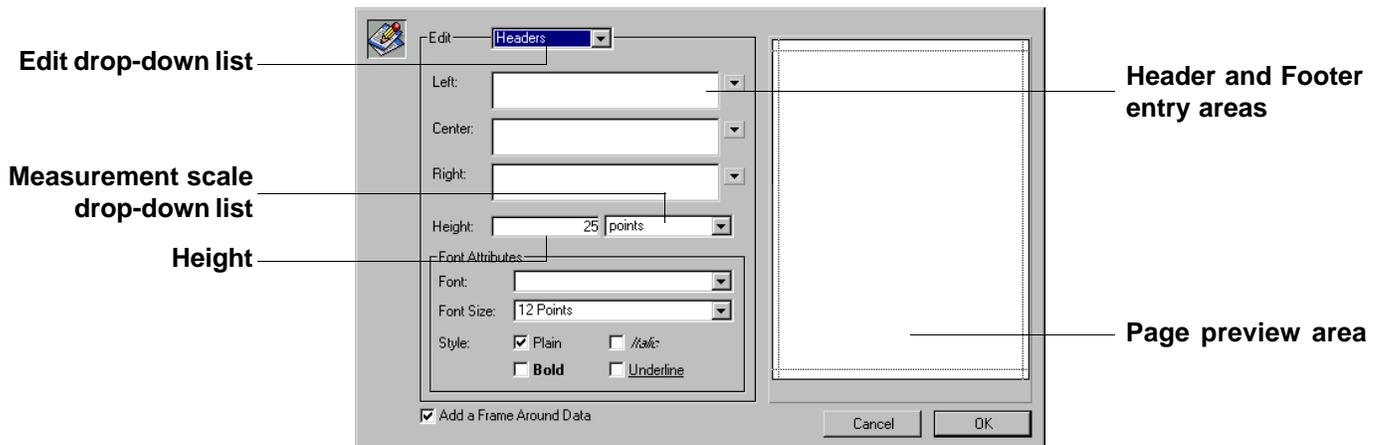
- Add page header and footer text
- Specify the size of the page header and footer areas
- Specify fonts, font sizes, and font styles for page header and footer text
- Insert codes that add page numbers and the date and time to your reports

Page headers can only be specified when printing to a printer. See *Printing a Quick Report* later in this section for more information about alternate output devices.

To add page headers and footers:

1. Choose *Headers and Footers* from the *File menu*.

The *Headers and Footers* window appears.



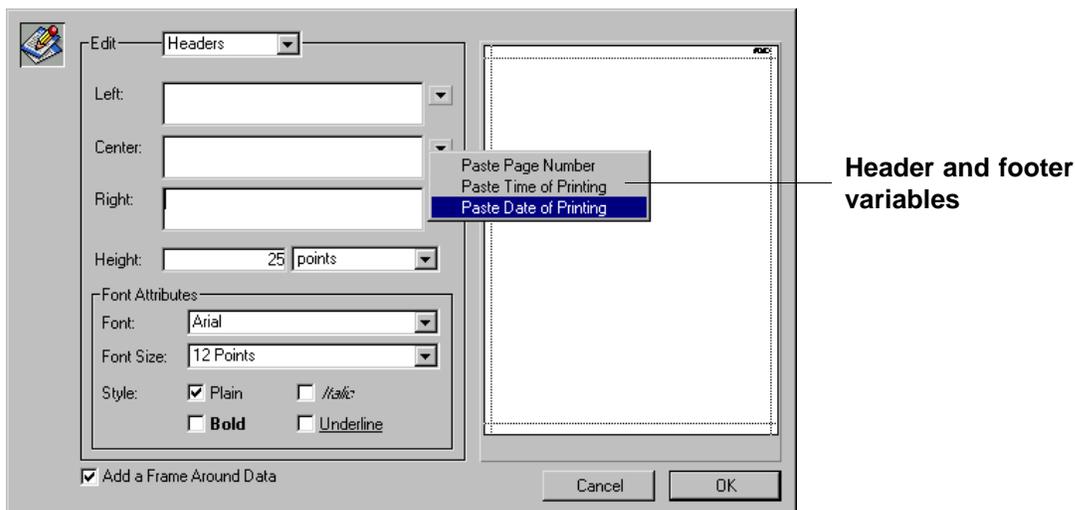
The *Header and Footers* window lets you specify both headers and footers from the same screen. You use the Edit drop-down list to specify either the header or footer.

2. Choose *Header or Footer* from the *Edit menu*.
3. Enter the header or footer height in the *Height area*.

When you first enter the dialog box, the header and footer are set to 25 pixels each. You can change values for the height and can use the measurement scale to enter values in inches or centimeters. As you enter the header and footer height, the dotted lines on the page preview area change to indicate the size of the header and footer as they will appear on the printed report.

The Quick Report Editor (Cont'd)

4. Select an entry area and type the header or footer text.



To the right of each entry area is a *pop-up menu* that lets you insert variables into the entry area.

You can insert the current Page Number, Time of Printing, or Date of Printing.

To insert a variable, choose it from the *pop-up menu*. MSDSpro inserts the variable in the entry area at the insertion point. You can combine variables with text.

Specifying Font, Font Size, Justification, and Style

You can specify different fonts, font sizes, justification, and styles for page headers and footers.

To specify font attributes:

1. Choose a font and font size from the drop-down lists and click one or more **Style check boxes**.

Specified attributes are applied to all three entry areas. You cannot apply different font attributes to different areas of the header or footer. Some Style combinations are not valid. For example, you can choose Bold and Italic, but you cannot choose both Plain and Bold.

The Quick Report Editor (Cont'd)

Printing a Quick Report

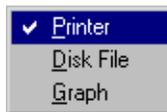
After you have completed your report design, you can print the Quick Report. You can print a Quick Report to a variety of output devices:

- **Printer**
- **Disk File**
- **Graph**

To select an output device:

1. **Choose *Print Destination* from the *File menu*.**

The *Print Destination hierarchical menu* contains three items:



Printer

This option uses the default printer you have chosen. You can print to a printer without using the *Print Destination* item by choosing *Print* from the *File menu*. If you are printing to a printer, you can preview the report before printing it.

To print to a printer:

1. **Choose *Print* from the *File menu*.**
2. **Click the OK button and follow the standard MSDSpro procedure for previewing and printing your report.**
3. **Choose the settings that are appropriate for your report and click the OK button.**

Disk File

This option sends your Quick Report to a disk file that you can open and modify with other applications, including text editors and spreadsheets. This option exports the records in the Quick Report to a text file.

When you use this option, MSDSpro automatically uses the column headings as the first "record" that is exported.

The Quick Report Editor (Cont'd)

To print to a disk file:

1. Choose **Disk File** from the **Print Destination hierarchical menu**.
2. Choose **Print** from the **File menu**.

MSDSpro displays a standard *Create File* window to enter a filename for the new file.

3. Enter a filename and click the **OK button**.

MSDSpro displays a dialog box that keeps you informed of the progress of the operation. Click the **STOP PRINTING** button to cancel the operation.

After the report is printed to a file, MSDSpro returns you to the *Quick Report editor*. Remember to change the output device if you want to resume sending a Quick Report to a standard printer.

Graph

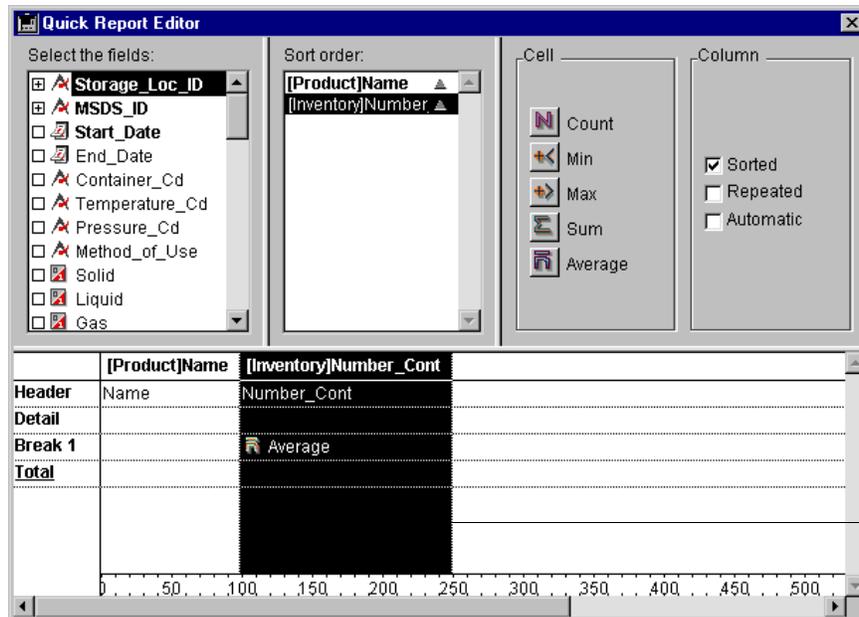
This option directs the report to a 4D Chart, MSDSpro's plug-in for plotting data. When you choose the Graph item in the Print Destination hierarchical menu, your report is presented as a graph rather than in tabular form. 4D Chart uses only the summary calculations and labels in the Break row. It uses the left-most non-numeric column for the Values axis (the horizontal axis).

To use the graph feature, the report should do the following:

- **Include from one to five numeric fields or formulas. These columns will be assigned to the values axis in the graph.**
- **Use one type of summary calculation per numeric field.**

For example, if you want to graph average quantities by Storage_Location, you should create a Quick Report with two columns, Storage_Location and Number_Containers. Use the Average summary calculation for Number_Containers.

The Quick Report Editor (Cont'd)



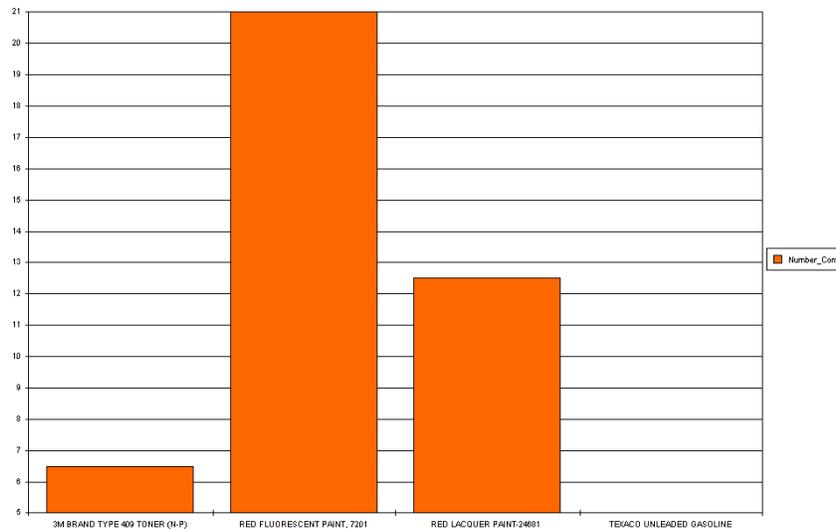
Value to be graphed

To print to a graph:

1. Choose **Graph** from the **Print Destination hierarchical menu**.
2. Choose **Print** from the **File menu**.

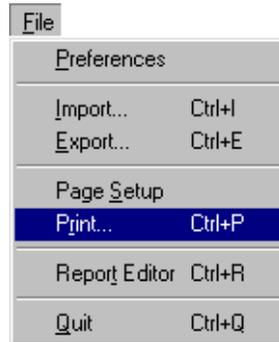
MSDSpro graphs your data as a column graph.

The following figure shows the graph produced from the Quick Report design shown on the previous page:



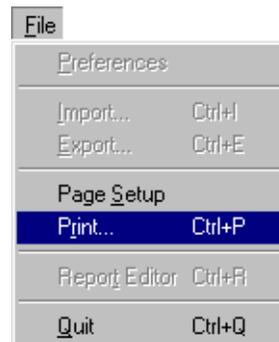
Printing From Output Forms

To print the current selection of records shown in the *Output form* of the current table, select *Print* from the *File menu*.



Printing From Data Entry Forms

To print the current record that is shown in the *Data Entry form*, select *Print* from the *File menu*.



Importing Data

The import of external data into MSDSpro is a simple process. MSDSpro automatically removes extraneous characters from the data being imported (control characters, escape codes, and quotes).

To import data into MSDSpro:

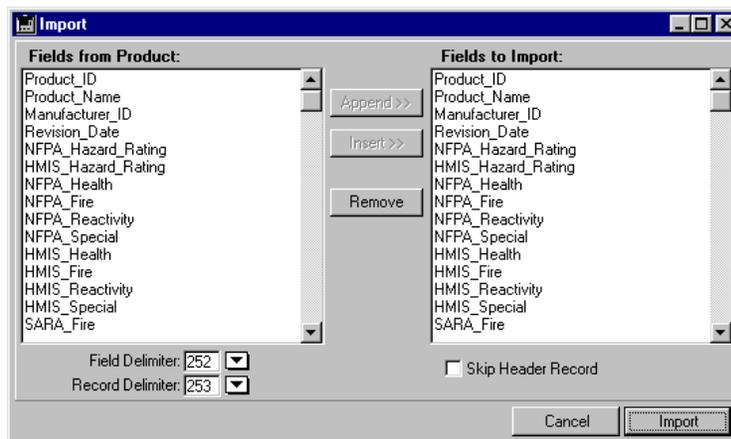
1. Select *Import/Export* from the *Admin Control Panel Special Functions tab*.

Importing Data (Cont'd)

2. Select the Import Table.

The *Output form* will display all records for the selected table.

3. Select *Import Data* from the *File menu* to display the *Import editor*, as shown:



4. Select from the Fields List on the left side to APPEND or INSERT into the Fields to Import list on the right side.

The order shown in Fields to Import must be the same order that the data columns are stored in the file to be imported.

5. Select fields that need to be removed from the Fields to Import and click REMOVE.

6. Select the proper field and record delimiters.

If you are importing data that contains free-flowing text fields (like Notes fields in the Product table, or the Document field), you must use a non-standard delimiter in the file to import. The reason is that a Tab (ASCII Code 9) or Return (ASCII Code 13) could be typed in the free-flowing text fields, but are sometimes also used as field and record delimiters. You must choose delimiters that were used to create the file to import, and will not be contained in the data itself.

7. Click Skip Header Record if header information exists in the data being imported.

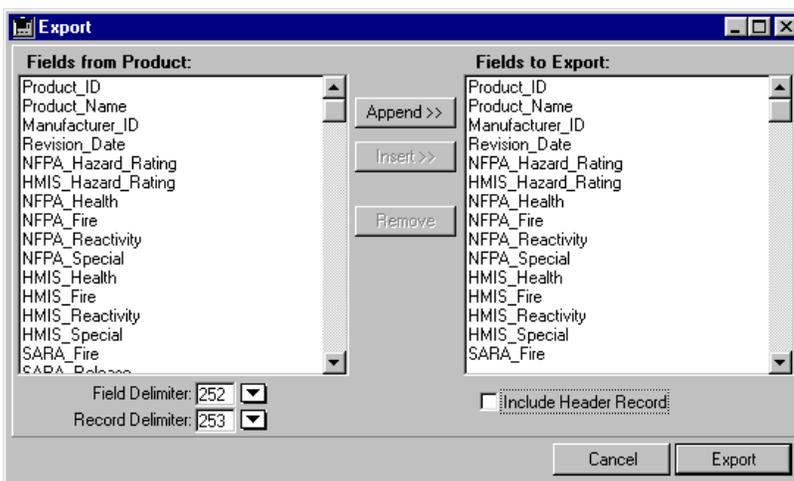
8. Click IMPORT to import the data from disk file.

Exporting Data

The exporting of data from MSDSpro is a simple process. To export data from MSDSpro:

1. Select **Import/Export** from the **Admin Control Panel Special Functions** tab.
2. Select the **Export Table**.

The *Output form* will display all records for the selected table.
3. Search for the records that will be exported using the **Search editor**.
4. Sort the records in the order required in the final disk file using the **Sort editor**.
5. Select **Export Data** from the **File menu** to display the **Export editor**, as shown:



6. Select from the **Fields List** on the left side to **APPEND** or **INSERT** into the **Fields to Export** list on the right side.

The order shown in **Fields to Export** will be the same order when they are exported.

7. Select fields that need to be removed from the **Fields to Export**, and click **REMOVE**.
8. Select the proper field and record delimiters.

If you are exporting data that contains free-flowing text fields (like **Notes** fields in the **Product** table, or the **Document** field), select **Special** from the choice list of available delimiters, and be sure to not use **Tab** (ASCII Code 9) or **Return** (ASCII Code 13) because they may be contained in the data itself and would not be useful as delimiters.

Exporting Data (Cont'd)

9. Click **Include Header Record** if you want to include headers in the exported data.
10. Click **EXPORT** to export the data to a new file.

Apply Formula

You do a global update when you want to make a special change to a group of records or to automate changes to a database that would otherwise be tedious and time-consuming. For example, you would perform a global update if you wanted to do the following:

- **Change all End Dates in the Inventory table to a certain date**
- **Format a Numeric or Alpha field**

The global update is done by “applying” a formula to the current selection of records. That is, the formula is used to make the change to each record in the current selection.

Here are two example formulas and explanations of the functions they perform:

End Date:= !12/31/97!

This formula applies the date of 12/31/97 (contained within “!” on each side of the date) to the End Date field. The !12/31/97! format is how MSDSpro recognizes the value specified as a date value. A null date would be typed as !00/00/00!, for example.

Product Name := Uppercase (Product Name)

This formula uses a built-in function to make the contents of the Product Name field uppercase. It ensures uniformity in the way Product Name appears in labels and reports.

To perform a global update, you use the *Formula editor* to write a formula that is applied to each record in the current selection in the current table only.

You use MSDSpro’s built-in commands to create formulas.

The Formula Editor

The *Formula editor* provides many shortcuts for writing formulas. You can click field names, operators, and commands to add them to the formula.

The *Formula editor* contains the following areas:

- **Editing area: This area displays the formula as you build and edit it. You create the formula in this area.**

The Formula Editor (Cont'd)

- **Keywords list:** This area contains a list of operators used to build a formula.
- **Fields list:** This area displays the names of the fields and layouts in the current table. The cycle arrows at the top of the fields list allow you to view the contents of other tables in the database. Click between the cycle arrows to display a complete list of all table names to select from.
- **Routines list:** This area contains an alphabetical listing of all MSDSpro built-in commands and functions.
- **Buttons area:** This area contains buttons for saving your formula, loading other formulas from disk, canceling an editing session, and applying the formula.

You build a formula by clicking keywords, field names, and commands. When you click an item, it automatically appears in the Editing area, where you can modify it with standard cut, copy, and paste techniques. You can also type directly into the Editing area. A formula can be only one logical line long. You cannot press Return and type another line.

To perform a global update to all records in the current selection:

1. **Set the current selection to the records to be updated using searches or *Show Subset* from the *Output form* of the current table.**
2. **Choose *Apply Formula* from the *Selection menu*.**
3. **Use the *Formula editor* to build the formula. Or, click the **LOAD** button to retrieve an existing formula from disk.**

If you click the Load button, MSDSpro displays an *Open File* window and asks you to select a file. When you load a file, it replaces any formula that currently appears in the Formula editor. After you load a formula, you can modify it in the editing area.

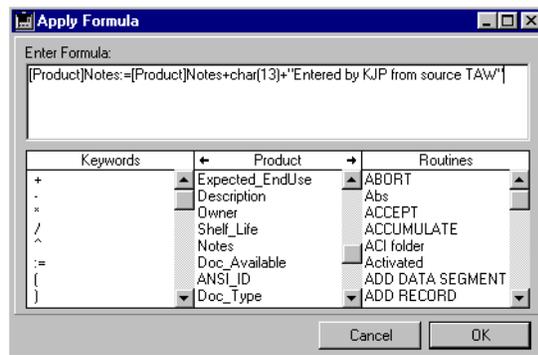
4. **If you want to save a new formula in a disk file, click the **SAVE** button.**

MSDSpro displays a *Save File* window and asks you to name a file to store the new formula.

The Formula Editor (Cont'd)

5. Click the **OK** button to apply the formula to the current selection.

MSDSpro closes the editor and applies the formula to the records in the current selection. Click the **CANCEL** button to close the editor and return to the *Output form* without applying the formula.



The formula shown will append a carriage return (char(13) is the ASCII value of 13) and "Entered by KJP from Source TAW" to the existing contents of the Notes field in the Product table, for each record in the current selection.

The Find Function

The Find Function is used to search the MSDSpro database and/or the MSDSpro CD library for MSDSs. It is only available on those computers upon which MSDSpro has been installed. The Find Function is accessed by clicking on the Find button located on the floating toolbar. Clicking on the Find button brings up the Find MSDS dialog. The Find MSDS dialog consists of three tabs, the **Simple Search tab**, the **Complex Search tab**, and the **Location Criteria tab**.

Simple Search Tab: The **Simple Search tab** allows users of the Find Function to search either the MSDSpro database, the MSDSpro CD library, or both simultaneously. The **Simple Search tab** consists of the following components.

The screenshot shows the 'Find MSDS' dialog box with the 'Simple Search' tab selected. The dialog has three tabs: 'Simple Search', 'Complex Search', and 'Location Criteria'. The 'Include Library' checkbox is unchecked. The 'Search For' field is empty. Below it are radio buttons for 'All' (selected) and 'Either'. The 'Search Method' section has radio buttons for 'Word begins with' (selected) and 'Word contains'. The 'Search By' section has radio buttons for 'Product Name' (selected), 'Company Name', and 'Ingredient CAS Number', along with a 'Sounds Like' checkbox. At the bottom, there is a logo for 'MSDS pro', a checkbox for 'Include Products without documents' (unchecked), a 'Limit' dropdown menu set to '5000', and 'Cancel' and 'Search' buttons.

Search Methods: Search Methods defines how searching will occur. Search Methods available under the simple search tab include:

- **Word Begins With/Word Contains:** Controls whether the information being searched upon must match the beginning of a word or be contained within that word. Selecting “Word Begins With” and searching for “ace” will only return records in which “ace” is in the beginning of the field being searched. For example, if the search was performed on the Product Name field then the product “Acetone” would be returned but the product “Formace” would not.
- **Exclude/Include CD-ROM MSDS library:** Controls whether or not the MSDSpro CD library will be included in the search. If the checkbox is checked, the MSDSpro CD library will be included in the search.
- **Include products without documents:** Controls whether or not product records with no attached MSDS will be included in the search.

NOTE: Include products without documents is only available to users logged in as DBA.

The Find Function (Cont'd)

- **Limit:** Sets the maximum number of search results that will be returned in a search. For example, if the limit pull down menu is set to 1000, then only the first 1000 matches to the information being searched upon will be returned, regardless of the total number of matches in the database.

Search Criteria: Search Criteria define which fields will be searched. Performing a search with the Search Criteria "Product Name" selected will return matches only to entries made in the Product Name field within the Product record. Search Criteria for performing a Simple Search include:

- **Product Name:** Searches the Product Name field. This field is found under the *Product tab* within the Product record.
- **Sounds Like:** Searches for product names that are phonetically similar to the search criteria.
- **Manufacturer:** Searches the Manufacturer Name field. This field is found under the *Product tab* within the Product record.
- **Ingredient CAS #:** Designates the Ingredient CAS # field as the field to be searched upon. This field is found under the *Ingredient tab* within the Product record.

Complex Search tab: The *Complex Search tab* allows users of the Find Function to perform much more specific searches. Whereas in the simple search mode a user can search on only one field at a time, under the *Complex Search tab* a user can search multiple fields simultaneously. For example, a user could search for product "acetone" made by manufacturer "Example Corporation" within a single search. The *Complex Search tab* is useful when significant information is known about a specific product to be searched upon and greatly reduces the number of search results the end user will have to look through in order to find the information desired.

The screenshot shows the "Find MSDS" dialog box with the "Simple Search" tab selected. The "Include Library" checkbox is unchecked. The "Product Name" field is empty, with "All" and "Word begins with" selected. The "Company Name" field is empty, with "Begins with" selected. The "MSDS ID" field is empty, with "Begins with" selected. The "Limit" dropdown is set to 5000. The "Search" button is highlighted.

The Find Function (Cont'd)

Search Methods: Search Methods available under the **Complex Search tab** include:

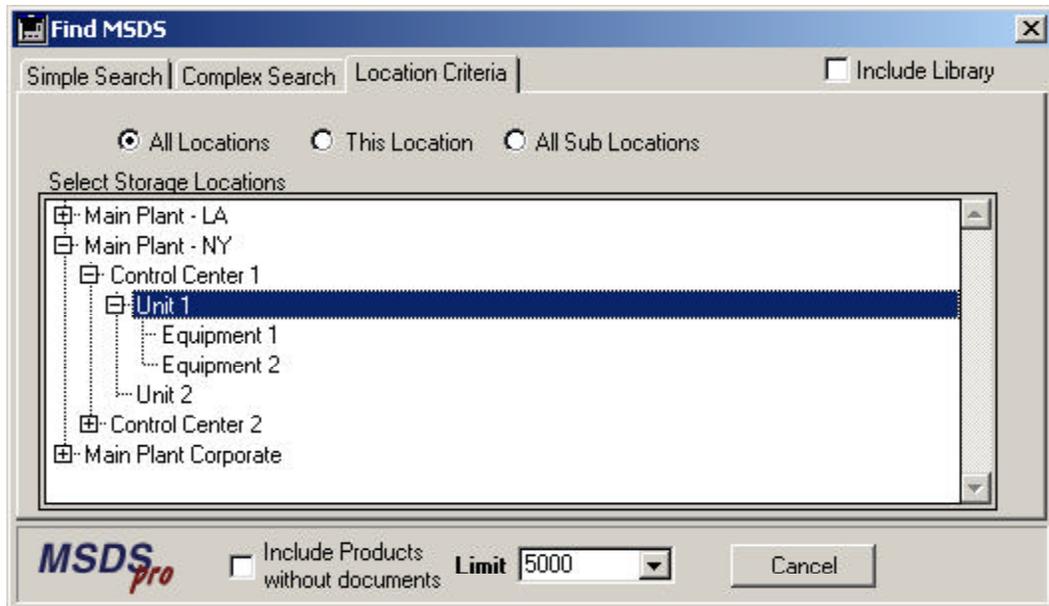
- **Word Begins With/Word Contains:** Controls whether the information being searched upon must match the beginning of a word or be contained within that word. Selecting “Word Begins With” and searching for “ace” will only return records in which “ace” is in the beginning of the field being searched. For example, if the search was performed on the Product Name field then the product “Acetone” would be returned but the product “Formace” would not.
- **All words/Either word:** Controls whether MSDSpro will try to match all the words or any word entered into the search field.
- **Exclude/Include CD-ROM MSDS library:** Controls whether or not the MSDSpro CD library will be included in the search. If the checkbox is checked, the MSDSpro CD library will be included in the search.
- **Include Products without documents:** Controls whether or not a product record that does not have an attached MSDS will be included in the search.
- **Limit:** Sets the maximum number of search results that will be returned in a search. If the limit is set to 1000, then only the first 1000 matches to the search criteria will be returned regardless of the total number of matches in the database.

Search Criteria: Search Criteria available under the **Complex Search tab** include:

- **Product Name:** Searches the Product Name field. This field is found under the Product tab within the Product Record.
- **Sounds Like:** Searches for words that sound similar to the search criteria.
- **Manufacturer:** Searches the Manufacturer Name field. This field is found under the Product tab within the Product Record.
- **MSDS ID:** Searches the MSDS ID field. This field is found under the *Product tab* within the Product Record.

The Find Function (Cont'd)

Location Criteria tab: The **Location Criteria tab** allows users to search for MSDSs based on the location at which the product is stored. This tab is used when users not only want to find an MSDS but also want to know to which locations, if any, it has been assigned as inventory. The **Location Criteria tab** is only used to further refine the criteria under which either a simple or a complex search will be performed.



Search Methods: Search methods available under the **Location Criteria tab** include:

- **All Locations/This Location/All Sub Locations:** Controls which locations will be searched for MSDSs matching the information searched upon. Choosing “This location” will only search the location selected but will not search any sublocations of that location. Choosing “All Sublocations” will search all the sublocations of the location selected.

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Data Access

Data Access allows access to the following tables/data entry areas within MSDSpro:

- Product Entry Wizard
- Products
- Company
- Locations
- Inventory
- Chemicals
- Chemical Authorization Requests
- Phrase Library
- Containers
- Assets
- Users
- MSDS Requests
- Waste Codes

Admin Control Panel

Data Access areas are accessed from the *Admin Control Panel*.



Product Entry Wizard

The Product Entry Wizard allows the end user to add new product records to the MSDSpro database quickly and easily with basic information. When new product records are created using the Wizard, information can be added to the following fields within the Product record.

- **Document:** Documents of many types and sources may be imported into the system.
- **Product Information:** Product Name, MSDS ID and Product Properties or characteristics such as PH and Specific Gravity can be added in this field.
- **Details:** Specific information such as Synonyms, specific flagging, can be added in this field.
- **Company:** Manufacturer Information.
- **Ingredients:** Ingredient Name, CAS number and Weight percents can be added in this field.
- **Inventory:** Detailed Inventory information on each product can be entered into this field.

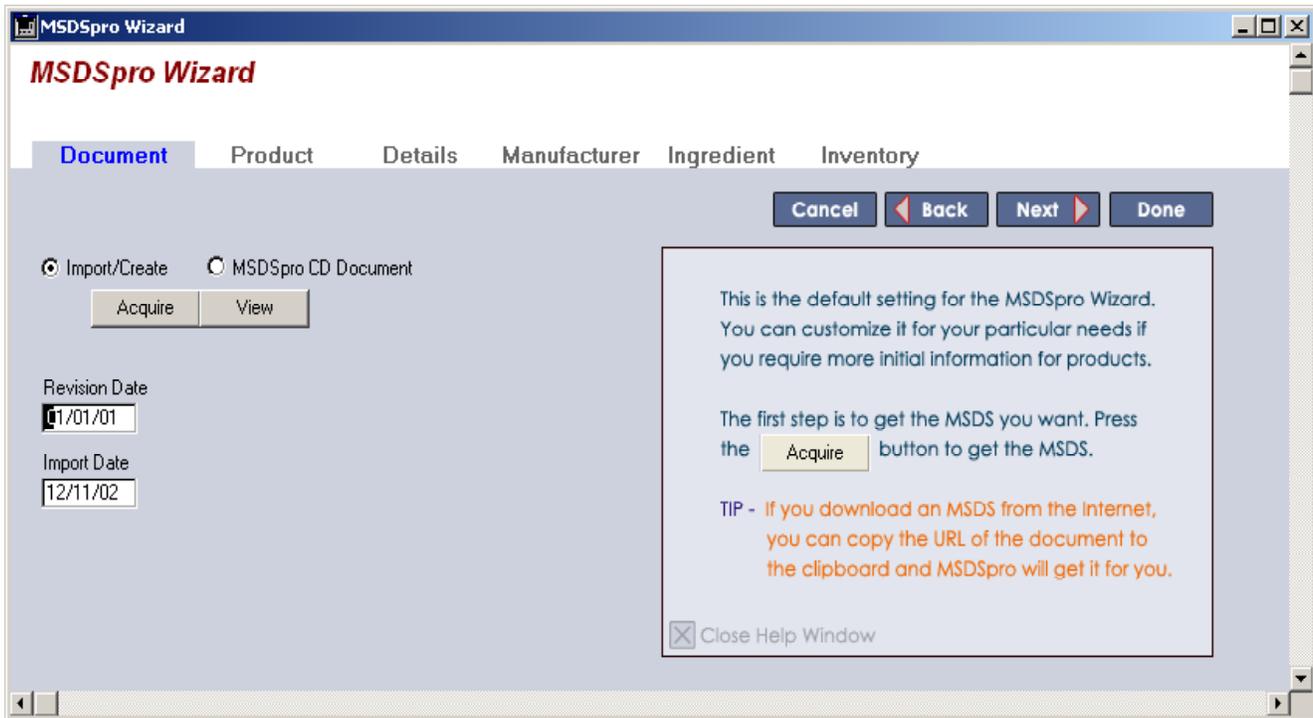
The Wizard requires only the Product Name and Manufacturer Name fields to be populated. The Wizard is accessed from the **Data Access** tab on the Admin Control Panel.



Click the **WIZARD** button to access the Product Entry Wizard

Product Entry Wizard (cont'd)

Document Tab:



Import/Create: Inside the Document tab you can Import Supported Document files from your hard Drive, the Manufacturers web site or create an ANSI Text Document.

CD Document: Import a MSDS from the CD library. Product Ingredient and manufacturer information will be populated automatically.

Revision Date: This is the date the MSDS was revised.

Import Date: The date that the MSDS was entered into your system.

Special Instructions: Additional information from the administrator regarding specific fields.

Product Entry Wizard (cont'd)

WIZARD PRODUCT TAB

The screenshot shows the 'MSDSpro Wizard' application window. The title bar reads 'MSDSpro Wizard'. The main window has a red header 'MSDSpro Wizard' and a navigation bar with tabs: 'Document', 'Product' (selected), 'Details', 'Manufacturer', 'Ingredient', and 'Inventory'. Below the tabs are four buttons: 'Cancel', 'Back', 'Next', and 'Done'. The 'Product' tab is active, showing two input fields: 'Product Name*' with the text 'TOLUENE' and 'MSDS ID*' with the text '0019'. A help box on the right contains the following text: 'Here is where you enter the name of the product. If you wish to assign a unique MSDS ID, such as an internal company number, you can later search by this number to bring up the MSDS. You can also add more fields to this section later. TIP - Enter the whole product name, such as XY123 Spray Adhesive. MSDSpro assigns an ID for you that can be edited.' At the bottom of the help box is a 'Close Help Window' button.

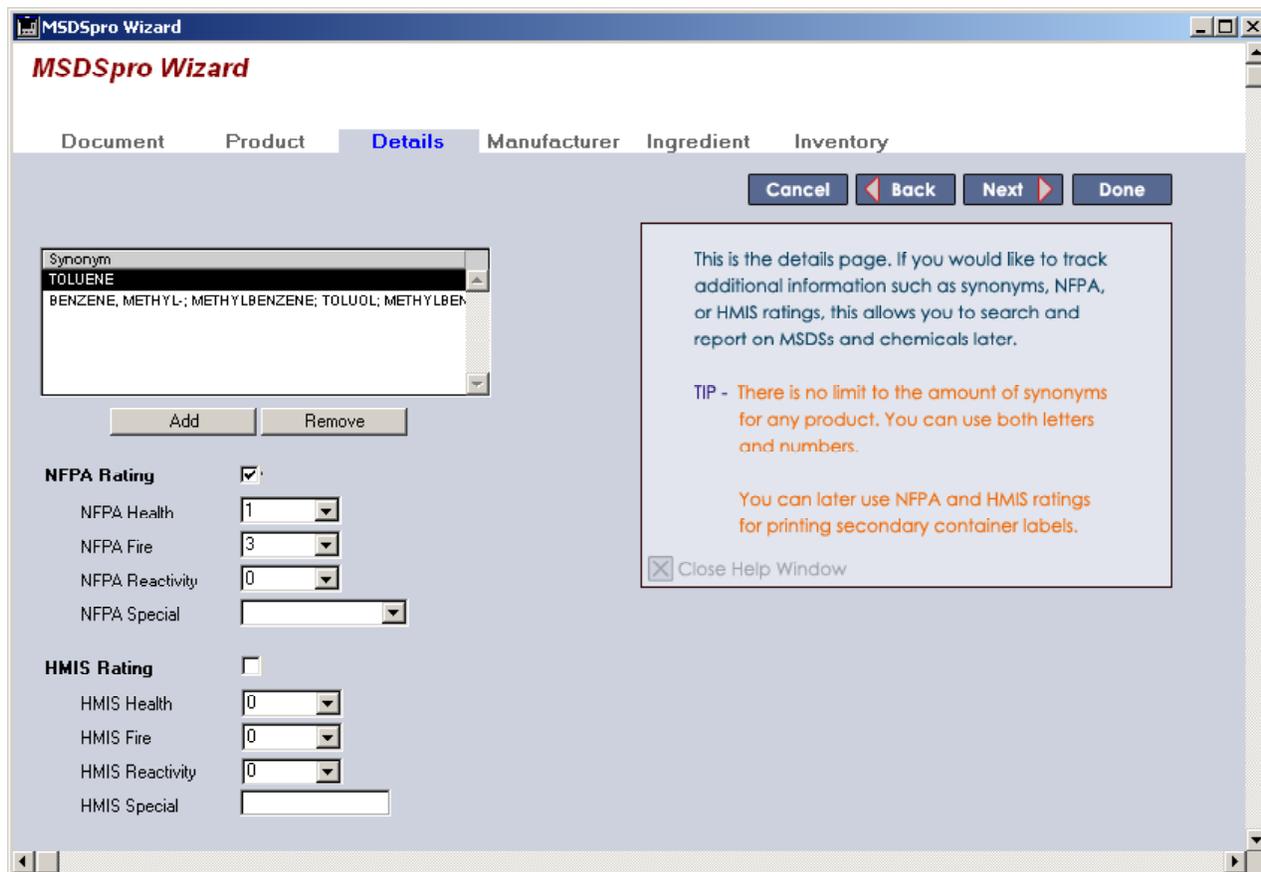
Product Name: Enter the name of your product here.

MSDS ID: If you currently have a tracking number devised for your MSDSs you may enter in that number into this field. Otherwise you may let the database automatically assign new tracking numbers for your MSDS.

Special Instructions: Additional information from the administrator regarding specific fields.

Product Entry Wizard (cont'd)

Details Tab



Synonyms: Enter all synonyms for your MSDS here.

NFPA Ratings: Enter in the NFPA symbol rating here, if relevant.

HMIS Ratings: Enter in the HMIS symbol ratings here, if relevant.

Product Entry Wizard (cont'd)

Manufacturer Tab

Company Name: When you enter in the Company name, MSDSpro will automatically complete this field, if the company has already been entered into your system. If it is a new entry, type in the company name, hit next and you will be prompted to enter in that manufacturer's information. **See MANUFACTURE DATA ENTRY FORM 4-50 (this page number will/has changed update for final review)**

Ingredient Tab

The Ingredient tab allows you to enter the chemical components of each product that you enter.

CAS Number: Enter in the designated chemical number.

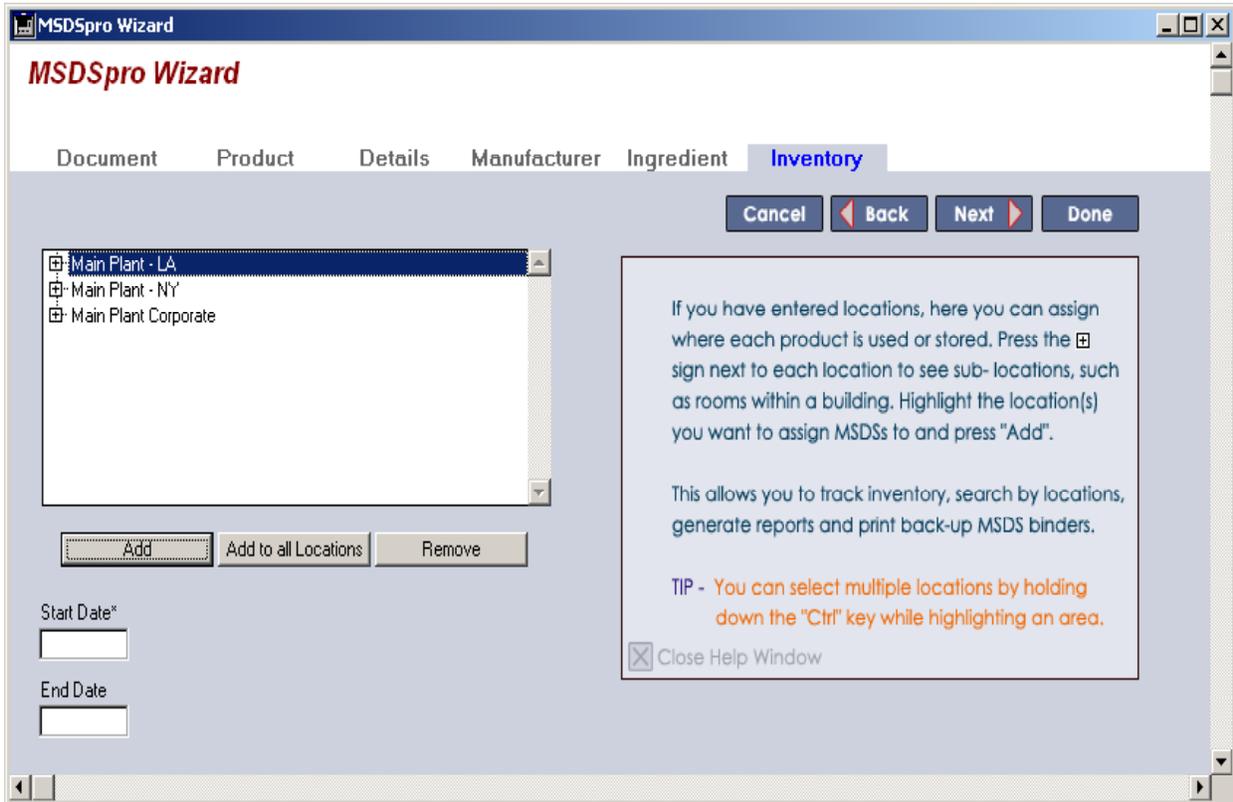
Ingredient Name: Enter in the chemical name of the chemical.

Min Weight: Enter in the Minimum Weight Percentage of this chemical.

Max Weight: Enter in the Maximum Weight Percentage of the chemical.

Product Entry Wizard (cont'd)

Inventory Tab

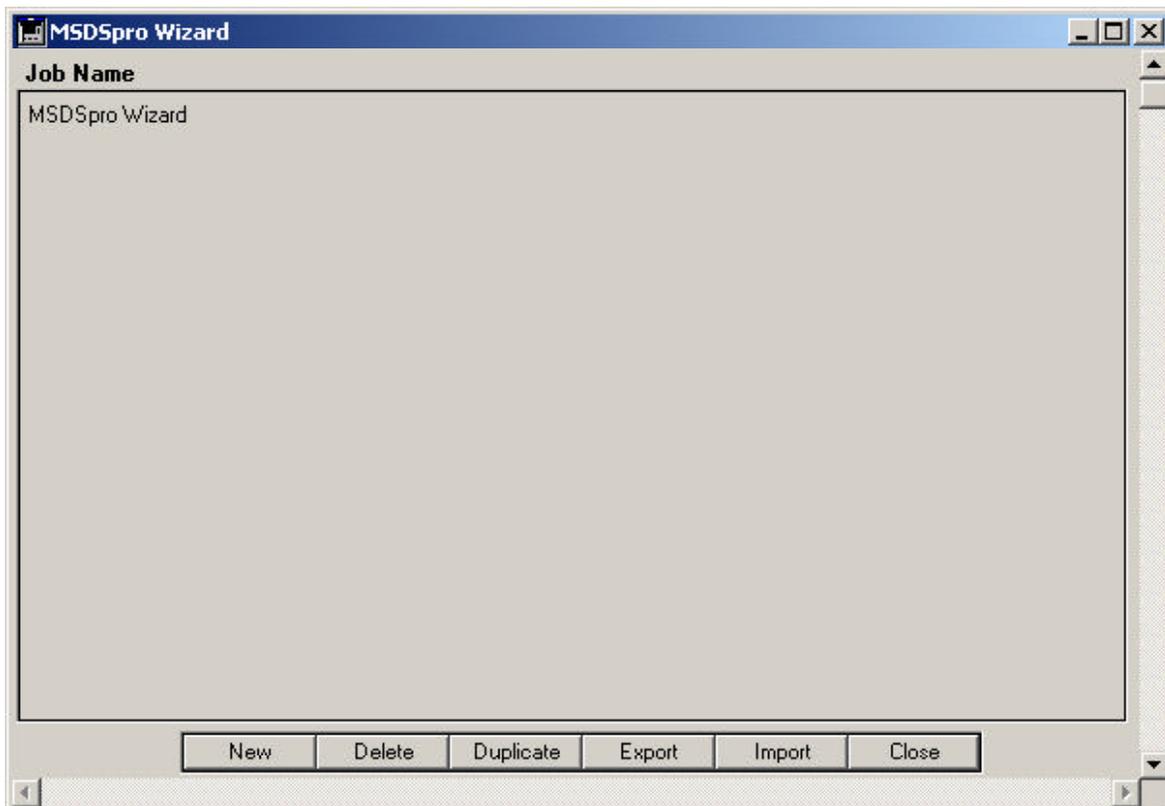


This is where you will assign your product to specific locations. Use the Location Drill Down to find the locations where the product is used or stored.

The Wizard Setup

The Administrator may modify the information presented within the Wizard. New wizard configurations may also be created.

The Wizard Setup can be found by going to **ADMIN, Special Functions**.

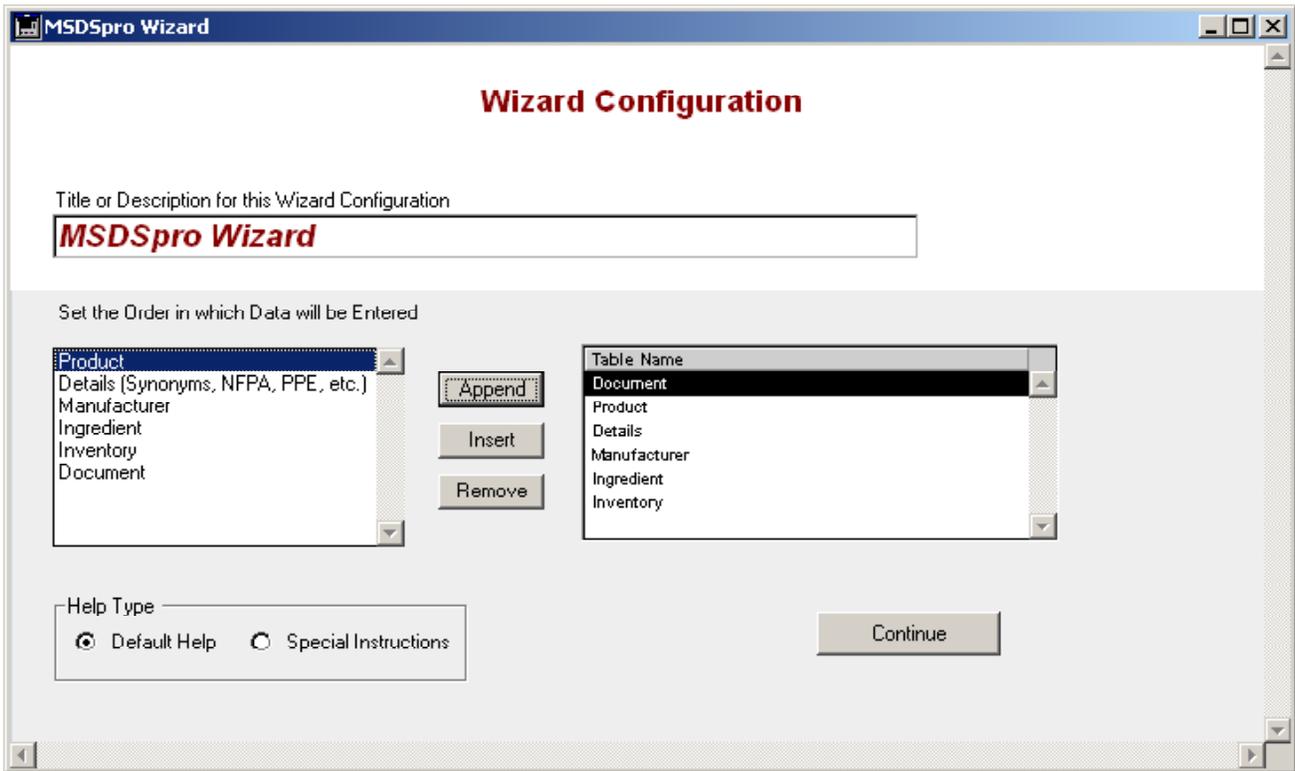


- New:** Create a new Wizard job.
- Delete:** Delete an existing Wizard job.
- Duplicate:** Duplicate an existing Wizard format job.
- Export:** Save your Wizard job to a file.
- Import:** Import a saved job from a file.
- Close:** Close this window.

The Wizard Setup (cont'd)

Title Page

To customize a new Wizard job, first select the pages that will be available. *PRODUCT, DETAILS, MANUFACTURER, INGREDIENT, INVENTORY* or *DOCUMENT*.



- **Default Help:** By selecting the Default Help button, the pre-designed help menus will be visible.
- **Special Instructions:** By selecting the *Special Instructions* button, the administrator will have the ability to add specific instructions for each feild.

The Wizard Setup (cont'd)

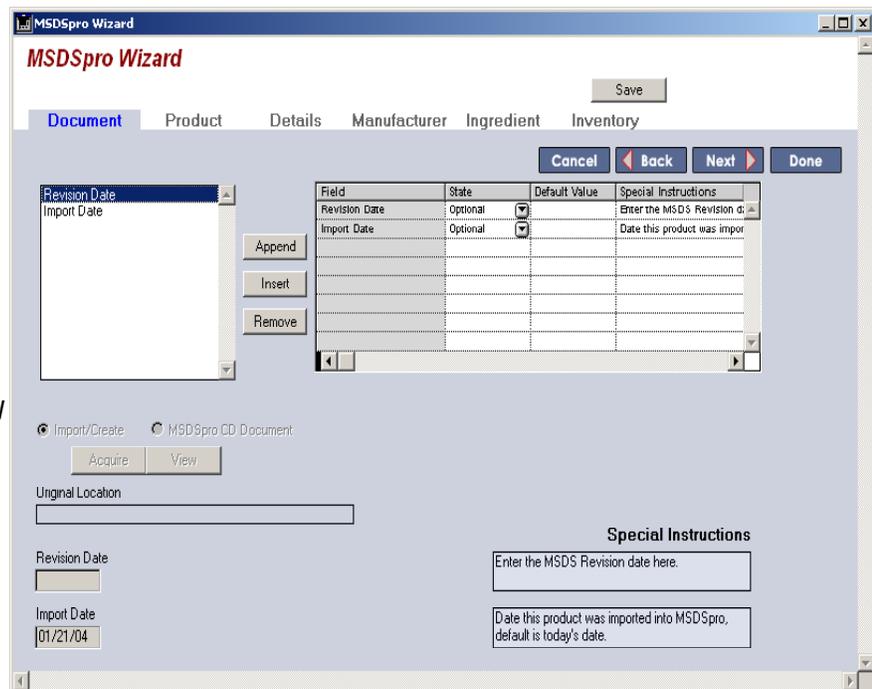
Document

Choose which fields to track in the *Document* Tab, Revision Date, Import Date or Path.



With *Default Help* on, *Special Instructions* will not be visible.

Default Help is off, and the *Special Instructions* are now visible.

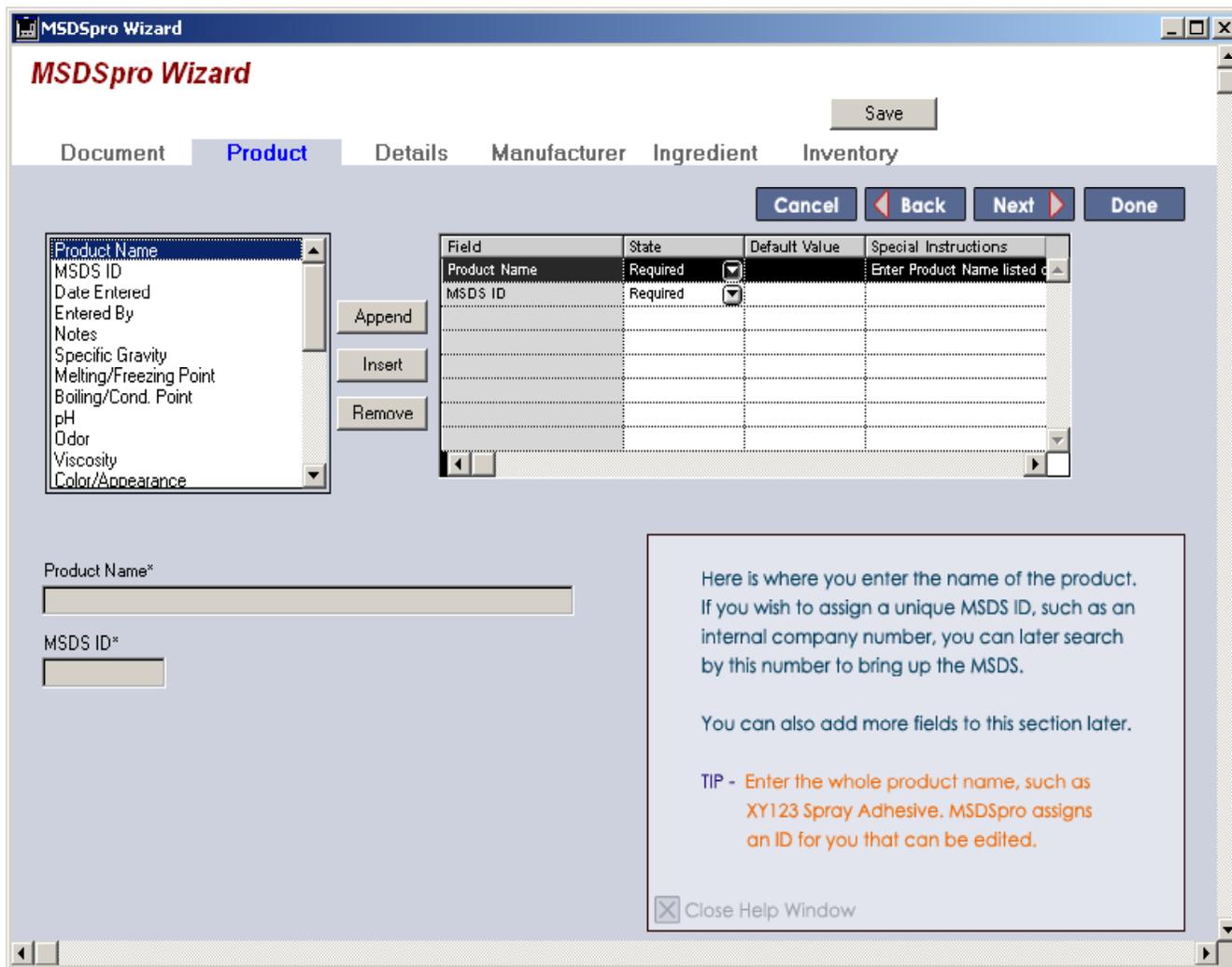


With each field that you select, the Database Administrator has the ability to check those fields as being Optional or Required. The Database Administrator will also be able to enter default values and any Special Instructions to aid in the entry process. Double click within the cell to enter information.

The Wizard Setup (cont'd)

Product

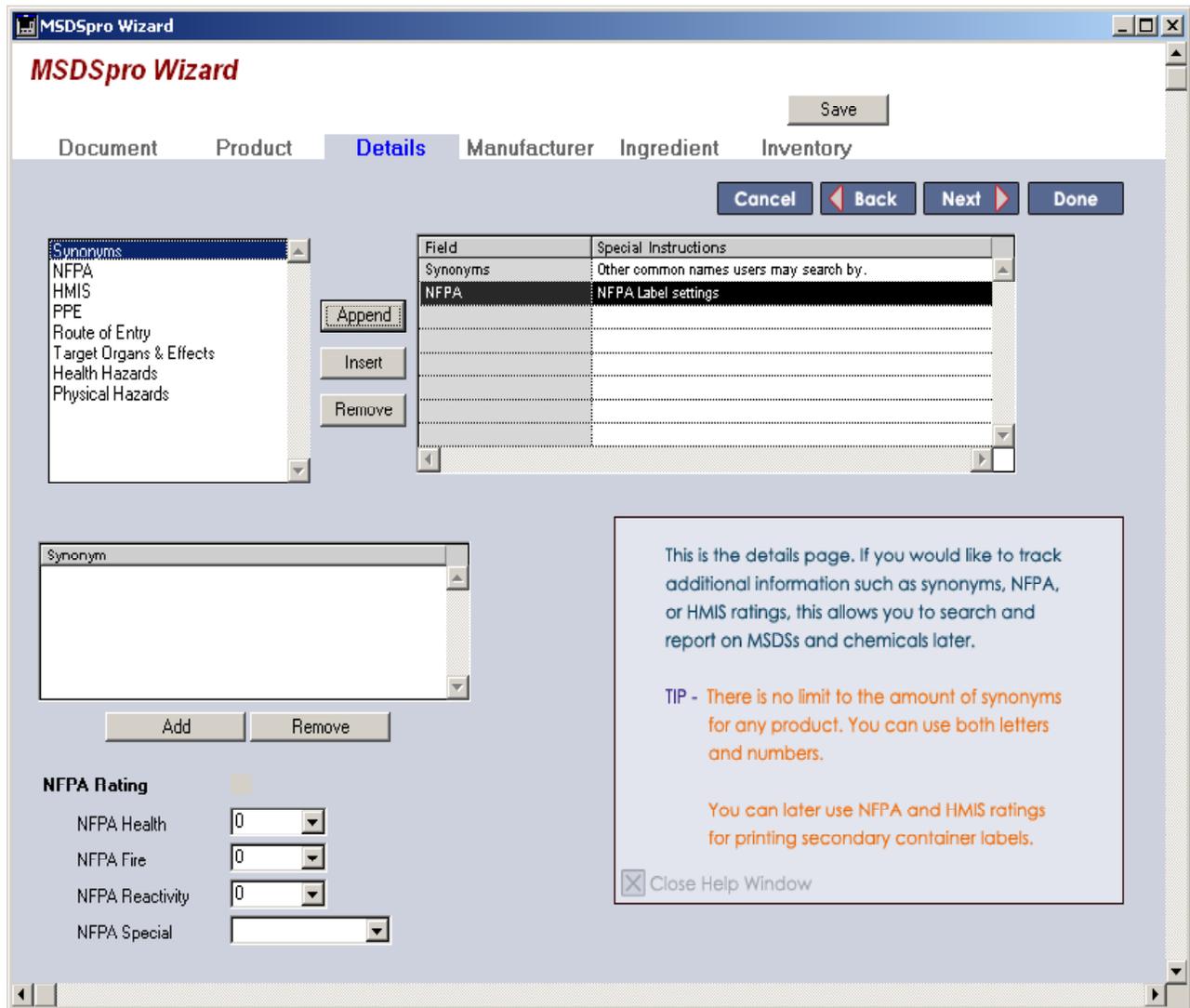
The *Product* Tab of the Wizard setup will allow the Database Administrator to select specific information to enter into MSDSpro from the MSDS. Special Instructions can be added for each entry for Product Name, MSDS ID, Date Entered, Notes, Specific Gravity, Melting/Freezing Point, Boiling/Cond. Point, pH, Odor, Viscosity, Color/Appearance, Physical State, Vapor Pressure, Vapor Density, UEL, FP Method, Flash Point, Density lbs/Gal., Molecular Weight, Solubility, Evaporation Rate, VOC%, Percent Volatile and Molecular Formula.



The Wizard Setup (cont'd)

Details

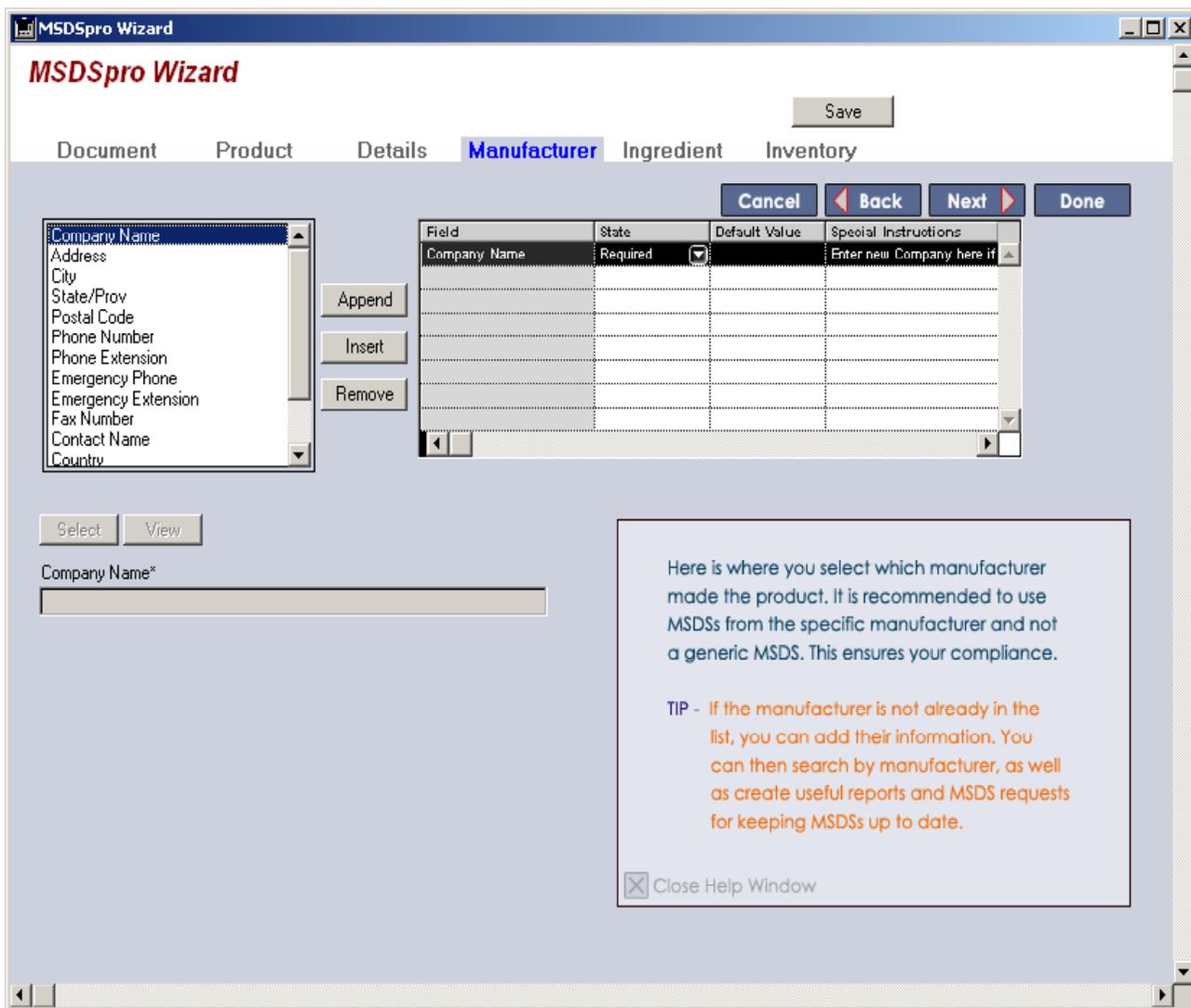
The *Details* Tab of the Wizard setup will allow the Database Administrator to select specific information to enter into MSDSpro from the MSDS. Special Instructions can be added for each entry for Synonyms, NFPA, HMIS, PPE, Route of Entry, Target Organs & Effects, Health Hazards and Physical Hazards.



The Wizard Setup (cont'd)

Manufacturer

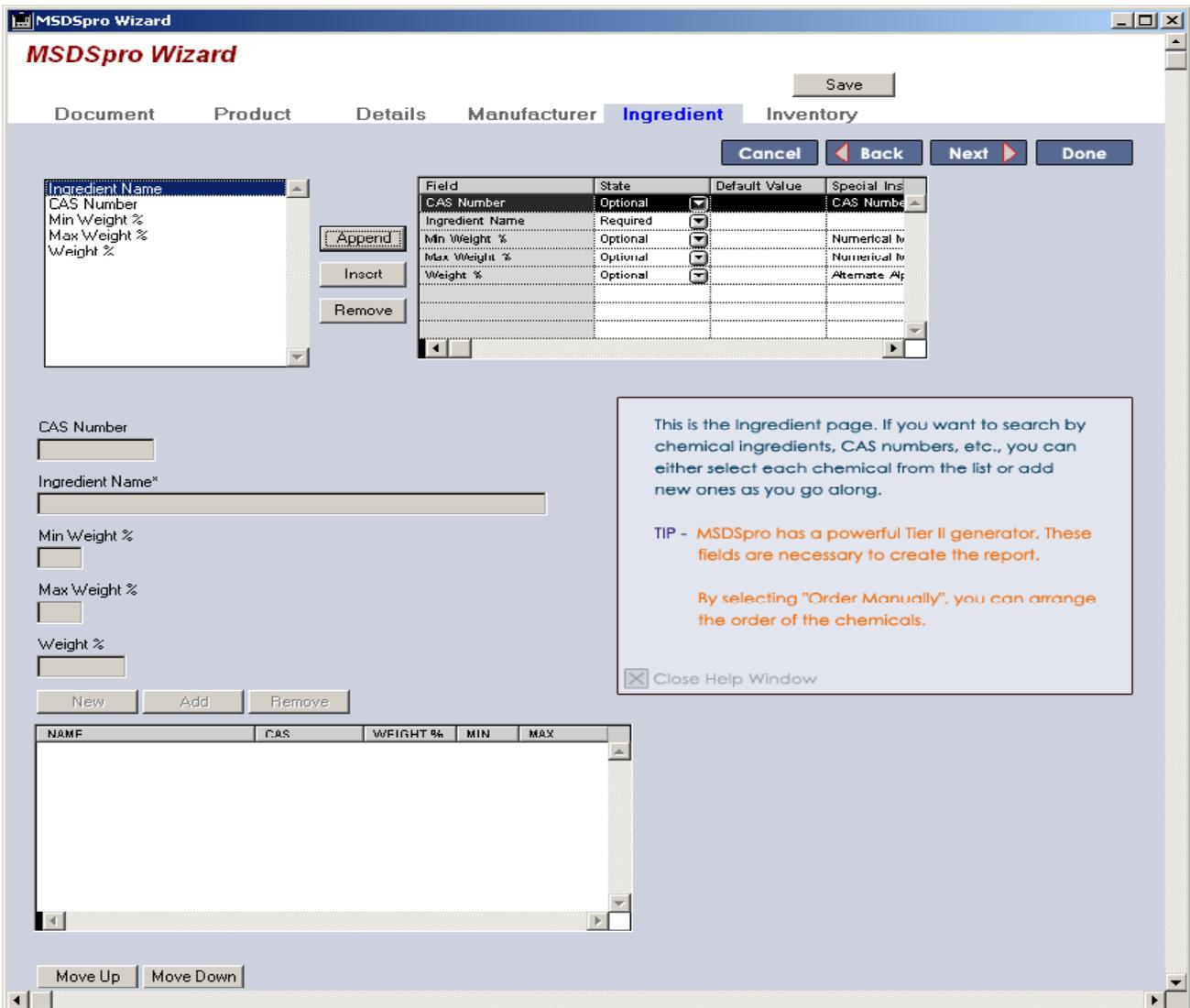
The *Manufacturer* Tab of the Wizard setup will allow the Database Administrator to select specific information to enter into MSDSpro from the MSDS regarding the Manufacturer. Each field can be marked as Required or Optional, and Special Instructions can be added for each entry for Company Name, Address, City, State, Prov., Postal Code, Phone number, Phone Extension, Emergency Phone, Fax Number, Contact name, Country, Notes and Website URL.



The Wizard Setup (cont'd)

Ingredient

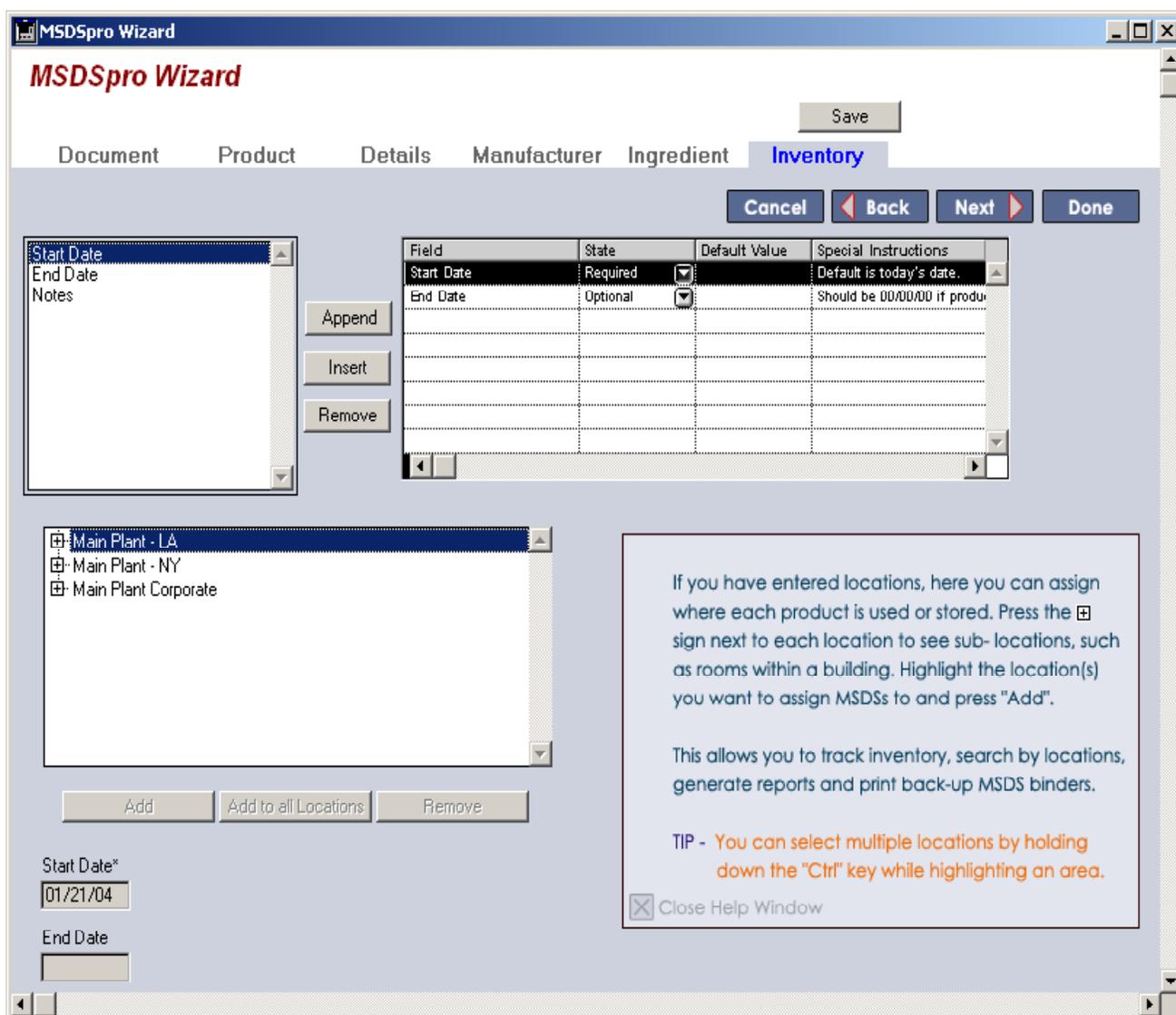
The *Ingredient* Tab of the Wizard Setup will allow the Database Administrator to select specific information to enter into MSDSpro regarding key ingredient information. Each field can be marked as Required or Optional, and Special Instructions can be added for each entry for Ingredient Name, CAS Number, Min Weight %, Max Weight % and Weight %.



The Wizard Setup (cont'd)

Inventory

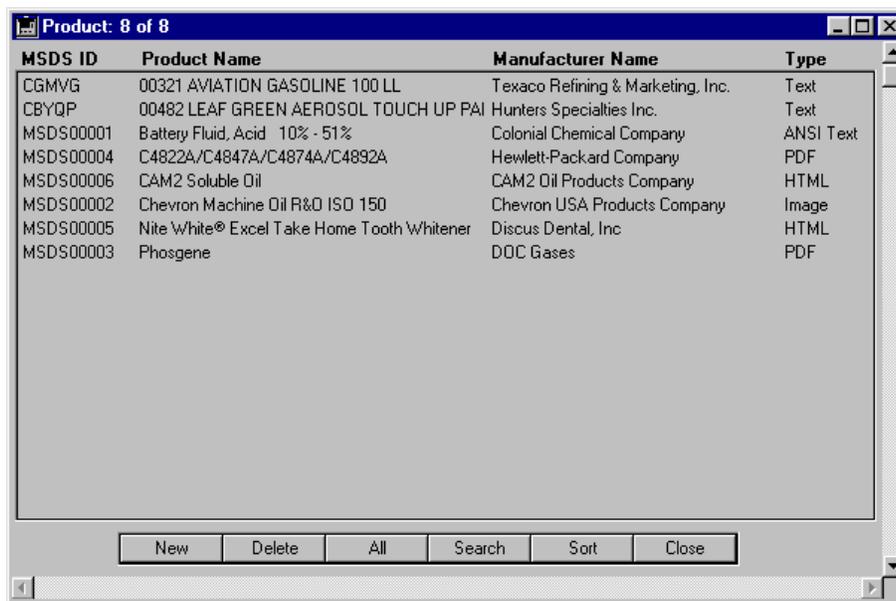
The *Inventory* Tab of the Wizard Setup will allow the Database Administrator to select specific information to enter regarding Inventory. Each field can be marked as Required or Optional, and Special Instructions can be added for each entry for Start Date, End Date and Notes.



Products

Product records are the basis for the entire MSDSpro system. The Product record itself consists of the data needed to describe the MSDS product represented. There are many data tables that are related to the Product table.

Product Output Form



The screenshot shows a window titled "Product: 8 of 8" containing a table of product records. The table has four columns: MSDS ID, Product Name, Manufacturer Name, and Type. Below the table is a control bar with buttons for New, Delete, All, Search, Sort, and Close.

MSDS ID	Product Name	Manufacturer Name	Type
CGMVG	00321 AVIATION GASOLINE 100 LL	Texaco Refining & Marketing, Inc.	Text
CBYQP	00482 LEAF GREEN AEROSOL TOUCH UP PAI	Hunters Specialties Inc.	Text
MSDS00001	Battery Fluid, Acid 10% - 51%	Colonial Chemical Company	ANSI Text
MSDS00004	C4822A/C4847A/C4874A/C4892A	Hewlett-Packard Company	PDF
MSDS00006	CAM2 Soluble Oil	CAM2 Oil Products Company	HTML
MSDS00002	Chevron Machine Oil R&D ISO 150	Chevron USA Products Company	Image
MSDS00005	Nite 'white® Excel Take Home Tooth Whitener	Discus Dental, Inc	HTML
MSDS00003	Phosgene	DOC Gases	PDF

By choosing *Print* from the *File menu*, the displayed Product records can be printed. In addition to the contents of the current window, the MSDS Documents and Product Summaries can also be printed.

From the Product *Data Entry form*, the MSDS Documents and Product Summary for the current Product record can be printed.

Product Data Entry Form

The Product record consists of the MSDS Product information that is only stored once. For example, Product Name, Manufacturer, Revision Date, Intended Use, Shelf Life, Description, etc.

The **CANCEL** and **SAVE** buttons will function on any form page and affect the data on all other form pages.

Product Data Entry Form - Product Tab

The screenshot shows a software window titled "Product: 20 of 24" with a tabbed interface. The "Product" tab is active, displaying the following information:

- Product Name:** TOLUENE
- MSDS ID:** 0019
- Company Name:** ULTRAMAR, INC.

Buttons for "CD-ROM", "Select", and "View" are located to the right of the input fields. Below this, there are three tabs: "Product Dates", "Characteristics", and "Properties". The "Product Dates" tab is selected and contains the following fields:

Date Entered	Start Date	Expected End
03/08/1990	00/00/00	00/00/00
Entered By	End Date	Shelf Life
	00/00/00	
Review Date	Review Number	Reviewed By
00/00/00		

At the bottom of the window, there is a "Library Document" checkbox, "Duplicate", "Delete", and "Manufacturer Requests" buttons, and "Cancel" and "Save" buttons.

- Click on the **CD-ROM** button to search for the MSDSpro CD Library for an MSDS.
- Click on the **SELECT** button to select from a list of all existing company records.
- Click on the **VIEW** button to view the information associated with the selected company.
- Click on the **DELETE** button to delete this product record from the database.
- Click on the **DUPLICATE** button to create a second copy of this product record.
- Click on the **EDIT LOG** button to manually view the text log tracking changes to this product record.

Product Data Entry Form (cont'd)

Product Data Entry Form - Product Dates subtab

The **Product Dates subtab** displays and stores important dates associated with a particular product.

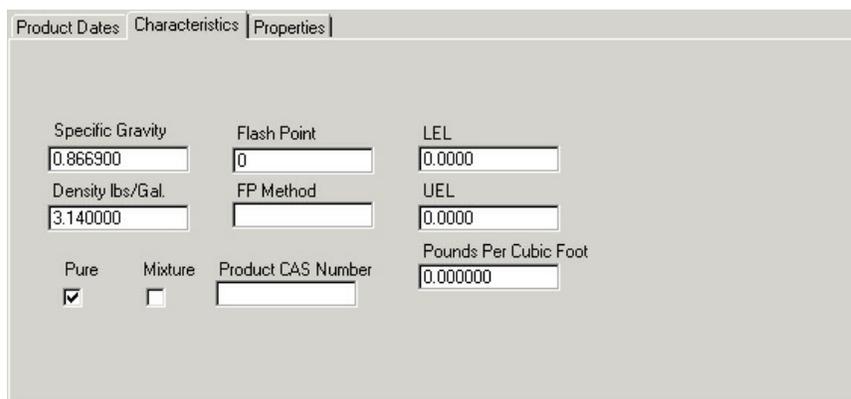
Date Entered	Start Date	Expected End
01/28/2000	02/02/2003	00/00/00
Entered By	End Date	Shelf Life
	00/00/00	
Review Date	Review Number	Reviewed By
00/00/00		

- The Date Entered field displays the date the product record was created.
- The Entered By field displays the name of the person who created the product record.
- The Review Date field displays the date on which the MSDS was last reviewed for accuracy.
- The Start Date field displays the date on which usage of the product began.
- The End Date field displays the date on which usage of the product was terminated.
- The Review Number field displays a unique numeric identifier designed to differentiate the review of this MSDS from others.
- The Expected End Date field displays the date on which usage of the product is expected to cease.
- The Shelf Life field displays how long the product can be stored before it must be disposed of.
- The Reviewed By field lists the name of the person who last reviewed the document.

Product Data Entry Form (cont'd)

Product Data Entry Form - Characteristics subtab

The **Characteristics subtab** displays and stores important characteristics of a particular product.



Specific Gravity	Flash Point	LEL
0.866900	0	0.0000
Density lbs./Gal.	FP Method	UEL
3.140000		0.0000
Pure	Mixture	Product CAS Number
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Pounds Per Cubic Foot
		0.000000

- The **Specific Gravity** field displays the ratio of the density of the product to the density of water.
- The **Density** field indicates the how many pounds one gallon of the product weighs.
- The **Flash Point** field displays the temperature at which the product is expected to ignite or explode.
- The **FP Method** field displays the proper storage to prevent the product from causing a fire.
- The **LEL** field displays the lower exposure limit for the product.
- The **UEL** field displays the upper exposure limit for the product.
- The **Pure** and **Mixture** checkboxes indicate whether the product is a pure substance or a mixture of 2 or more substances.
- The **Product CAS Number** field displays the associated Chemical Abstract Service number for this product, if one exists.
- The **Pounds per Cubic Foot** field indicates the how many pounds one cubic foot of the product weighs.

Product Data Entry Form (cont'd)

Product Data Entry Form - Properties subtab

The **Properties subtab** displays and stores important properties of a particular product.

Physical State	Boiling/Cond. Point	Vapor Density
<input type="text"/>	<input type="text"/>	<input type="text"/>
Color/Appearance	Melting/Freezing Point	Vapor Pressure
<input type="text"/>	<input type="text"/>	<input type="text"/>
Viscosity	Solubility	Percent Volatile
<input type="text"/>	<input type="text"/>	<input type="text"/>
Odor	Evaporation Rate	Molecular Formula
<input type="text"/>	<input type="text"/>	<input type="text"/>
pH	VOC %	Molecular Weight
<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>

- The **Physical State** field displays whether the product exists and a solid, liquid or gas.
- The **Color/Appearance** and **Odor** fields indicate the appearance and smell of the product.
- The **Viscosity** field lists the products associated resistance to flow.
- The **pH** field lists the acidity of the product.
- The **Boiling Point** and **Melting Point** fields indicate at what temperature the product converts from a solid to a liquid and from a liquid to a gas.
- The **Solubility** field displays the products capacity to be dissolved.
- The **Evaporation Rate** field displays the products potential for evaporation.
- The **VOC %** field displays the percentage of the product classified as volatile organic compounds.
- The **Vapor Density** and **Vapor Pressure** fields display the density of and pressure exerted by the product's evaporate at normal atmospheric pressure.
- The **Percent Volatile** field lists the percentage of the product with the potential to evaporate at normal atmospheric and temperature ranges.
- The **Molecular Formula** field displays the chemical makeup of the product.
- The **Molecular Weight** field displays the weight of one mole of a compound.

Product Data Entry Form - Document Tab

The **Document tab** displays a list of MSDSs or other documents attached to the product record and information associated with each one.

The attached documents window lists each MSDS attached to the product record and its related information

Manufacturer	Supplier	Rev. Date	Type	WHMIS	Language	Status	Classification
ULTRAMAR, INC.		04/01/03	PDF	False	USEnglish	Available	Site Map
ULTRAMAR, INC.		06/02/99	PDF	False	USEnglish	Available	MSDS
ULTRAMAR, INC.		06/02/99	ANSI Text	False	USEnglish	Available	MSDS

- Click on the **NEW** button to create a new document for the current product.
- Click on the **IMPORT** button to attach a MSDS to the highlighted document.
- Click on the **VIEW** button to view the highlighted document.

The **EDIT** button appears when either the selected Document is a Text or ANSI text.

- Click on the **DELETE** button to delete the highlighted document.
- Check the **Show Archived** checkbox to list MSDSs that have been archived for this product.
- Click on the **SELECT** button to choose the appropriate **Manufacturer** or **Supplier** record from a list of all existing records.

Product Data Entry Form - Document Tab (cont'd)

- **Click on the VIEW button (to the right of the Company Name and Document Supplier fields) to view the record associated with the entry in the Manufacturer Name or Supplier field.**
- **Check the No Auto Update checkbox to prevent this document from being included in any of MSDSpro's automatic update functions.**
- **Check the WHIMIS Document checkbox to indicate that this product is covered under WHIMIS.**
- **The Revision Date field displays the date the highlighted document was last revised.**
- **In the Document Language field, select the language the highlighted document is written in.**
- **In the Document Status field, select whether the highlighted document is available or unavailable.**

If the Document Status is set as unavailable, this document will not be returned in search results.

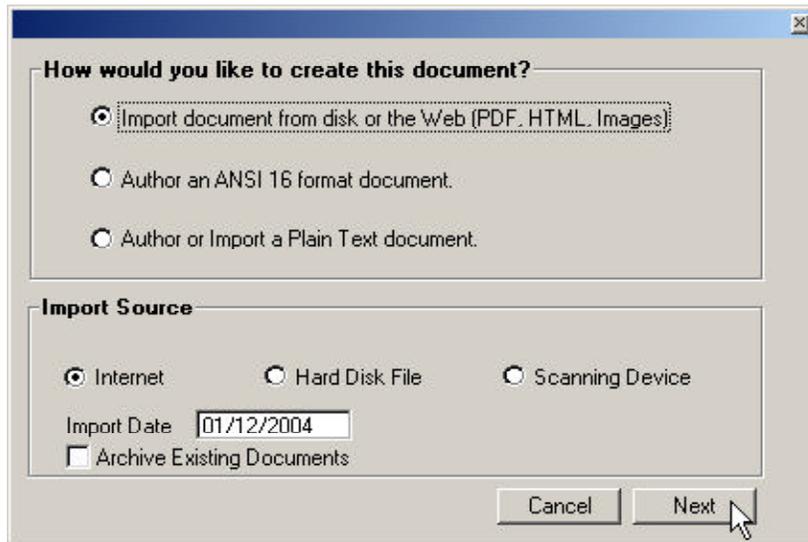
- **The Classification field shows what kind of document is associated with the highlighted line item.**

The Classification field defaults to MSDS but will show proper text if the attachment is a Site Map, Technical Data Sheet, or Data Sheet.

Adding a document to the product record

To add a document to the product record

1. Within the Document Tab, Click on the NEW button.
2. Click Import.
3. Select your import Source.



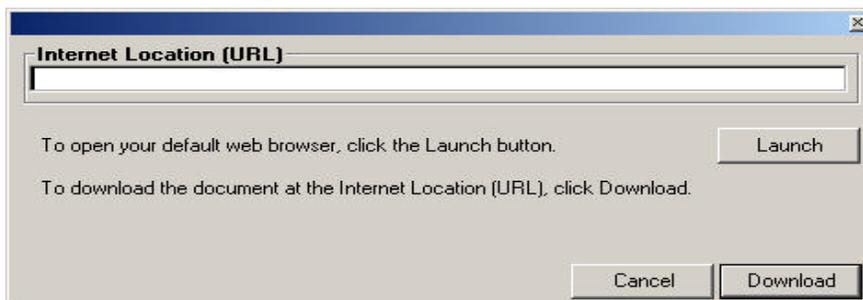
Import Source

There are three ways to import documents.

1. Internet
2. Hard Disk File
3. Scanning Devices

Internet - Adding a web page document to the product record

To add a document to the Product Record from the Internet, choose the *Internet* option from *Import Source*. A prompt will appear asking for a URL. To acquire a URL see section 4-24

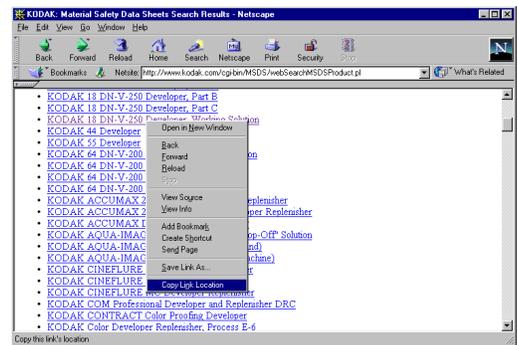
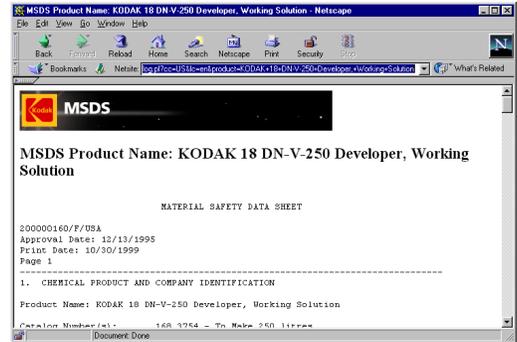


Adding a web document to the Product Record

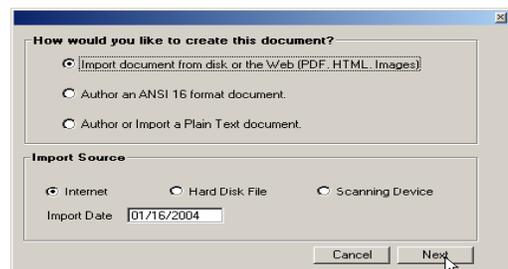
Acquiring the URL for MSDSpro:

To download:

1. Copy the URL from your Web Browser. This is accomplished either of two ways:
 - View the HTML document through your Web Browser. Highlight the Location (URL) shown and copy to the clipboard (Ctrl-C).
 - Instead of viewing the HTML document, right-mouse click on the Link, and select Copy Link Location (URL), which will copy the URL to the clipboard.



2. Select INTERNET as Import Source.
3. Click DOWNLOAD.



4. MSDSpro will automatically add the URL to the Internet Location (URL) field. MSDSpro will automatically detect the type of document that is being downloaded. (PDF, HTML)
5. Click DOWNLOAD.

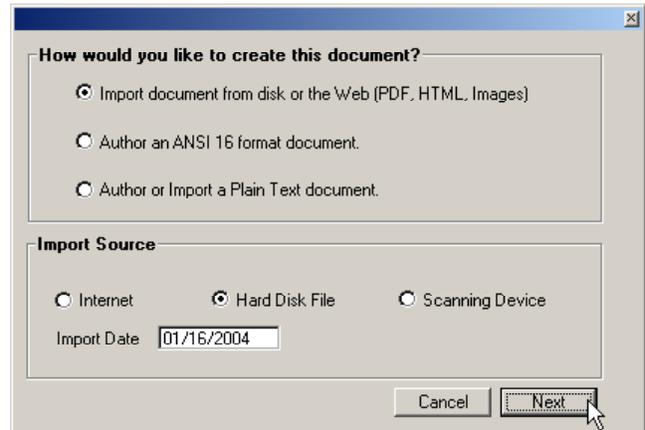


If errors are encountered, the Proxy settings may need to be configured in the Preferences area. See *Preferences* within the *Special Functions* section.

Adding a document to the Product Record from Hard Disk

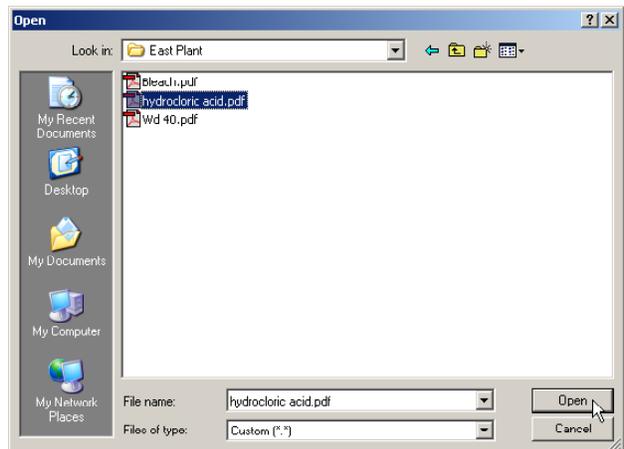
Acquiring file from the Hard Disk:

- Select *Hard Disk* from the *Import Source*.



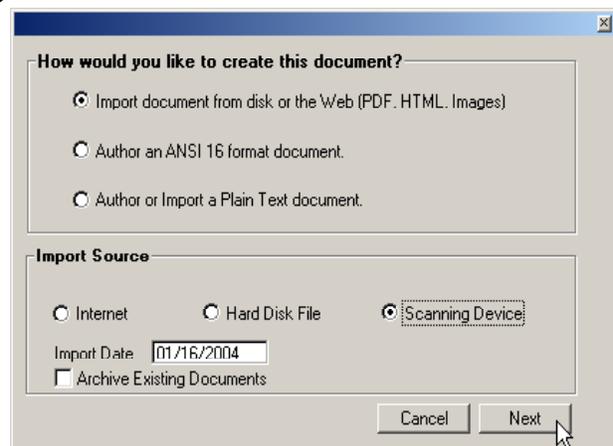
- Locate the file on your computer, select the file to be linked to the Product.

- Press **OPEN**.

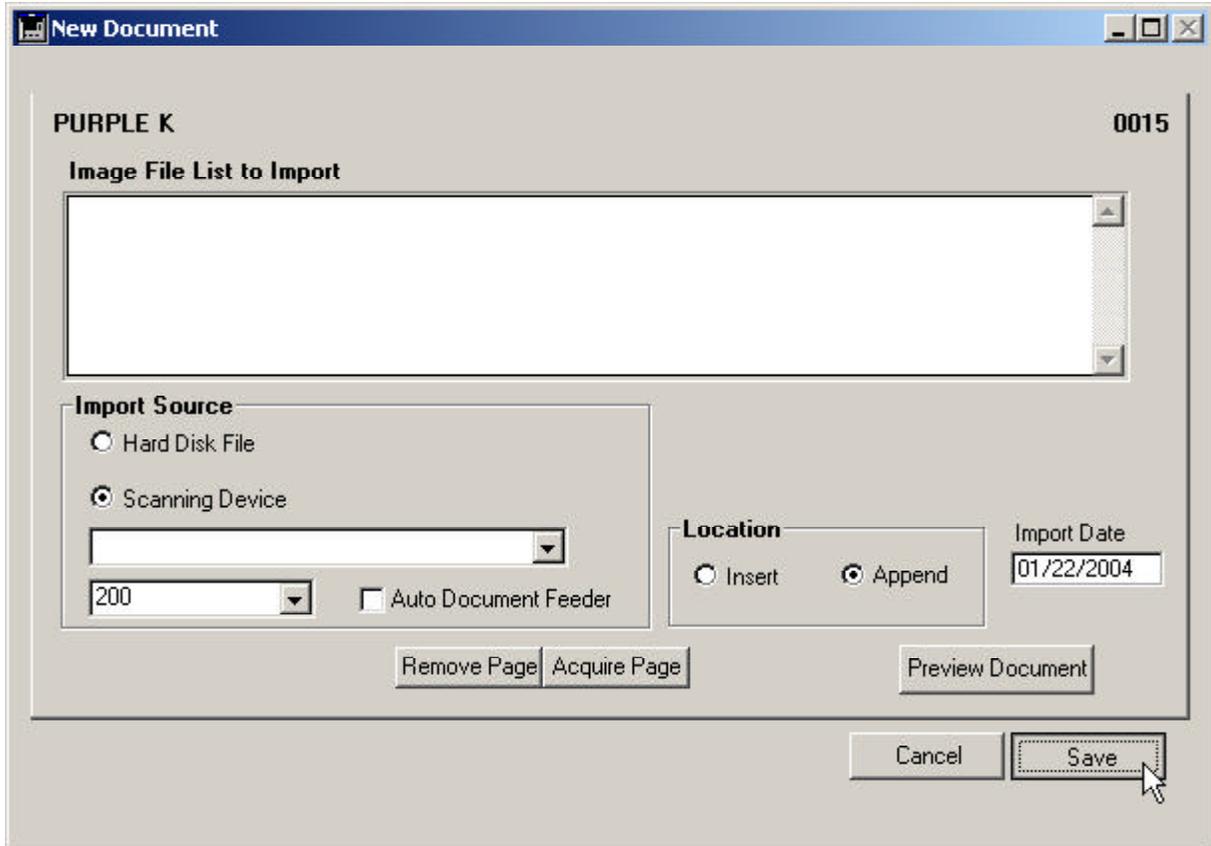


Adding a document from a Scanning Device

- Select *Scanning Device* from the *Import Source*



Adding a document from a Scanning Device (Cont'd)



- **Hard Disk:** Import images from your hard drive.
- **Scanning Device:** Access the scanner to be used by selecting it from the drop down menu.
- **Remove Pages:** Pages selected will be removed.
- **Acquire Pages:** Activate your scanner.
- **Preview Document:** View your image before accepting

Author an ANSI 16 format document

To author an ANSI Text document to the product record:

1. Within the *Document tab*, click on the **NEW** button.

A new line item is displayed. The new line item is automatically highlighted.

2. Click on the **Author an ANSI 16 format document** button.

3. Click on **NEXT**.

4. Enter **MSDS information under the relevant sections**.

Product and Ingredient information cannot be added in the ANSI 16 Section Document Data Entry form. Enter this information under the *Product tab* and the *Ingredient tab* within the product record.

5. Use the **Phrase Library** to enter as much information as possible. To learn how to use the **Phrase Library** to add phrases to an ANSI 16 Section Document, see Section 4-84.

6. Enter the remaining information by manually typing into the lower text field of each section.

Phrase Heading	Phrase Text
Target organ	Prolonged or repeated overexposure may cause central nervous system, kidney, liver.
Inhalation	Slightly irritating to eyes and respiratory tract.
EYE CONTACT:	Immediately flush with clean water for 15 minutes. Seek medical attention.

7. Once all the information has been entered, click the **SAVE** button in the lower right hand corner.

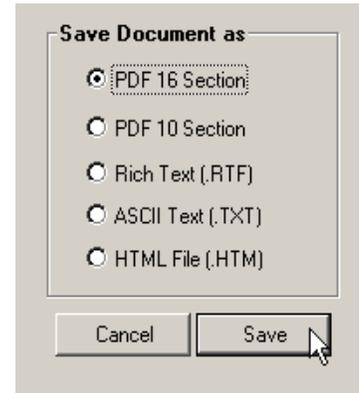
Note: ANSI documents are exported to a PDF document. The PDF version of the document will be used for display over the Intranet and in any printing or reports.

Exporting ANSI MSDS Documents

The **SAVE AS...** button allows for the exporting of the MSDS document. The file is created after using the *Save File* window to select the name for the new disk file and the location to save. Use this button to save a copy of the MSDS outside the MSDSpro database

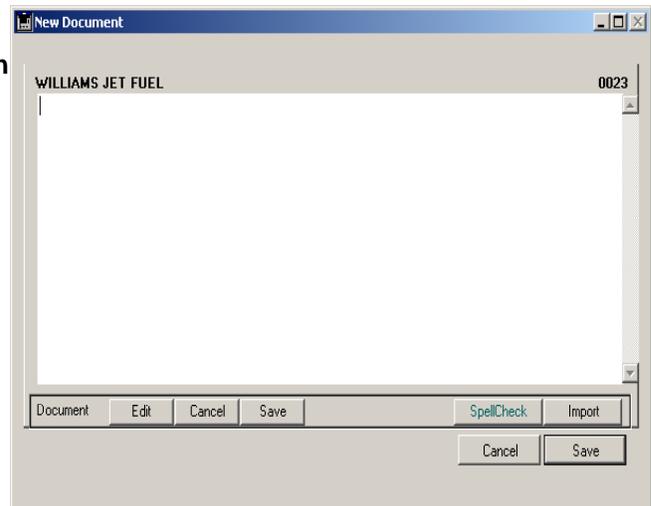
The different export options are:

- **PDF 16 Section**
Create an ANSI 16 section format MSDS.
- **PDF 10 Section**
Create a 10 section format MSDS will be created.
- **Rich Text (.RTF)**
Create a Text file with rich text formatting.
- **ASCII Text (.TXT)**
Create a plain text file.
- **HTML file (.HTM)**
Create a Web based file.



Author or import a Plain Text document

1. **Select Author or Import a Plain Text document.**
2. **Enter in the MSDS information as needed.**



There are two Import Source options for Text MSDS documents:

- **Hard Disk:** Imports .TXT files from the hard drive.
- **Internet:** Imports .TXT files from the web.

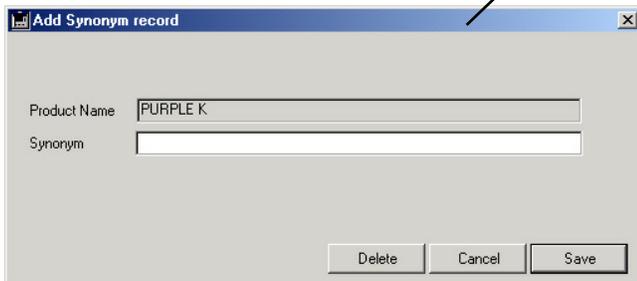
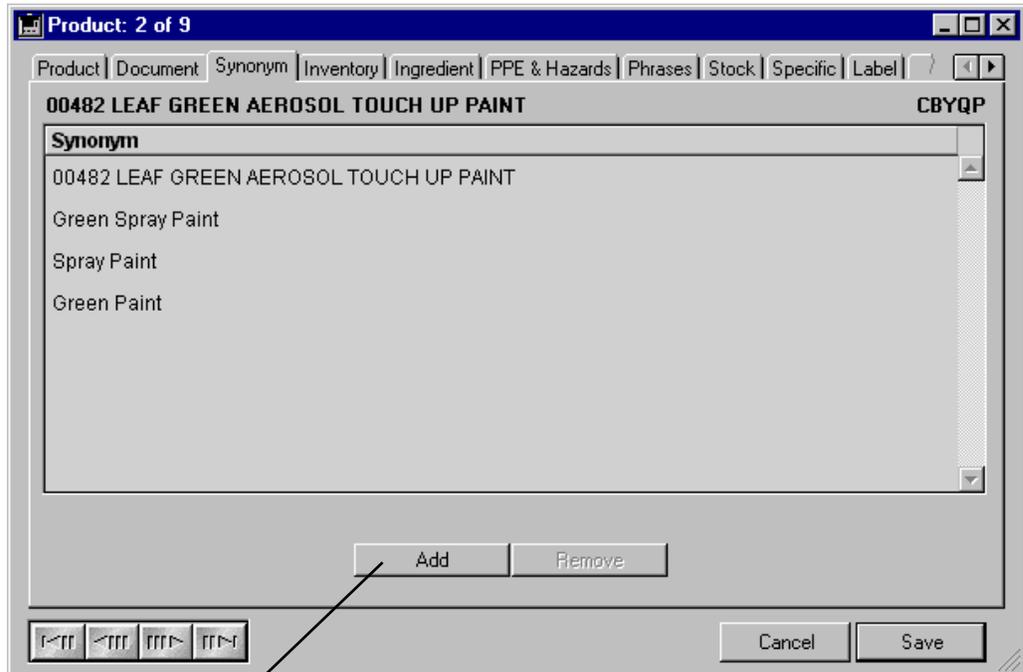


Product Data Entry Form - Synonym Tab

The **Synonym tab** displays the current Synonyms for this Product. An unlimited number of Synonyms may exist for each Product. By default, there is always one Synonym that matches the Product Name, which cannot be modified or deleted.

When searching MSDSpro by Product Name, the Synonyms are searched for matching keywords. Sounds-Like Phonetic searching is also used in conjunction with Synonym keywords.

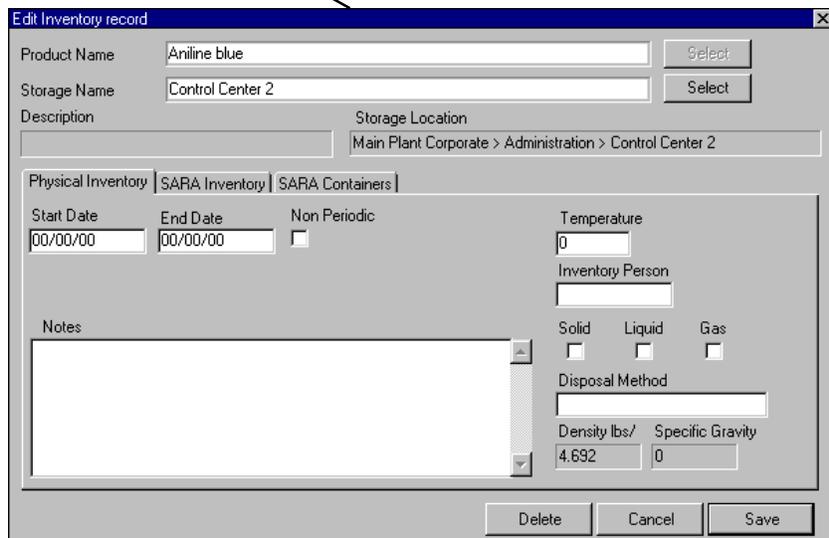
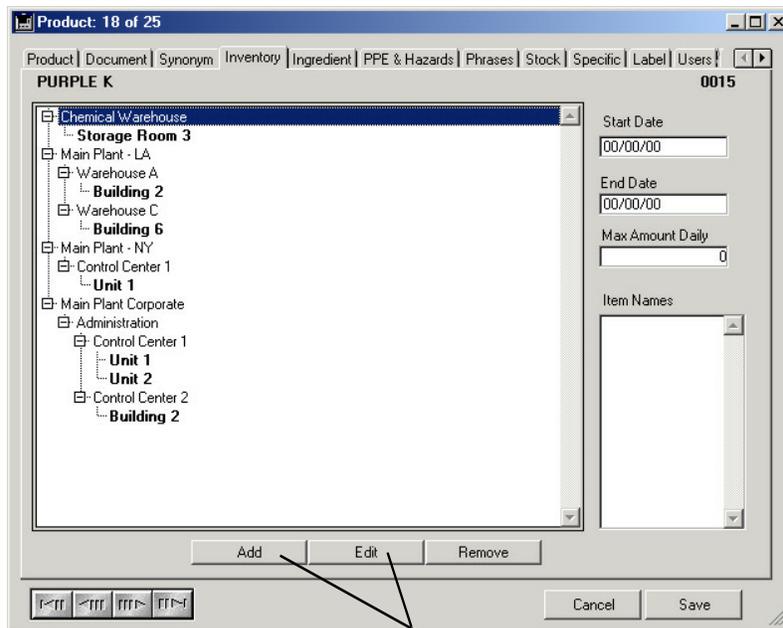
- Click the **ADD** button to create a new Synonym record.
- Click the **DELETE** button to remove a highlighted Synonym record.
- Double-click a Synonym to modify the record.



Product Data Entry Form - Inventory Tab

The **Inventory tab** is used to add, modify, or delete Inventory and Container records for each Product. An unlimited number of Inventory and Container records may exist for a Product. The Product is stored as Inventory at the Locations shown in **bold** under the **Inventory tab**.

- Click the **ADD** button to add an Inventory record.
- Click the **DELETE** button to remove a highlighted Inventory record.
- Click the **EDIT** button or double-click to modify an Inventory record.



Clicking on the **ADD** or **EDIT** button loads the *Inventory Data Entry form*. The *Inventory Data Entry form* is covered on pp. 4-61 through 4-56.

Adding a Inventory Location

Clicking on the **ADD** or **EDIT** button on the **Inventory tab** loads the *Inventory Data Entry form*. The *Inventory Data Entry form* is covered on pp. 4-61 and 4-62.

The screenshot shows a software window titled "Edit Inventory record". At the top, there are two input fields: "Product Name" with the value "PURPLE K" and a "Select" button to its right; and "Storage Name" with the value "Building 2" and another "Select" button to its right. Below these is a "Description" field and a "Storage Location" field containing the path "Main Plant - LA > Warehouse A > Building 2". A set of tabs is visible, with "Physical Inventory" selected. The main form area contains several fields: "Start Date" (01/30/2000), "End Date" (00/00/00), and a "Non Periodic" checkbox. To the right are "Temperature" (0) and "Inventory Person" fields. Below these are checkboxes for "Solid", "Liquid", and "Gas". Further down are "Disposal Method", "Density lbs/" (0), and "Specific Gravity" (0) fields. At the bottom of the window are three buttons: "Delete", "Cancel", and "Save".

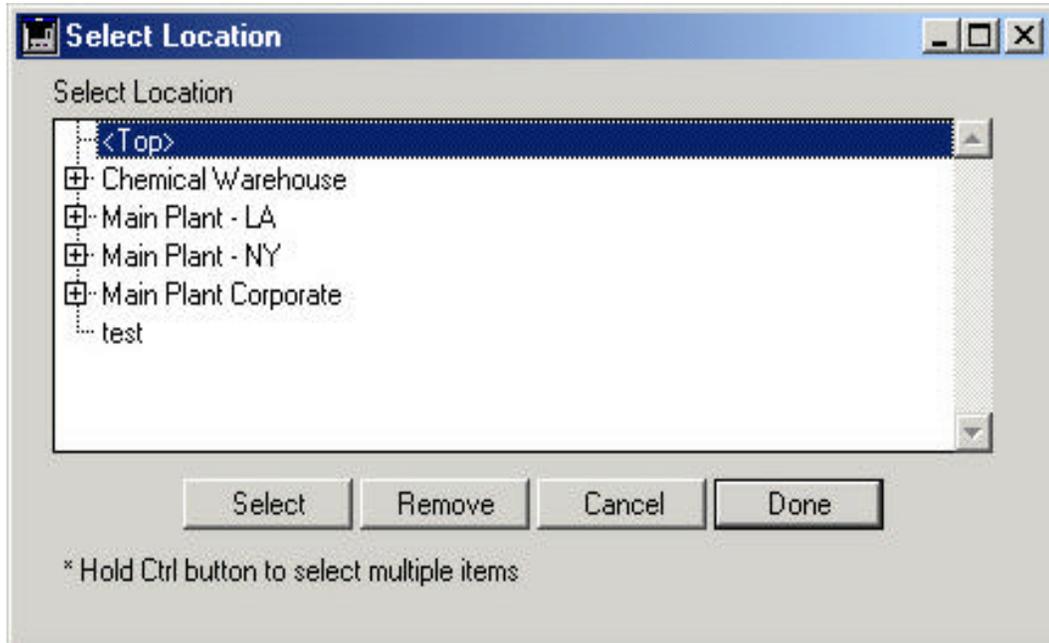
1. To add the Product as Inventory to a Location, click on the **SELECT** button to the right of the **Storage Name** field.

This loads a list of all Locations known as the *Select Location Output form*.

Adding a Inventory Location (Cont'd)

The Select Location Output form:

Click **SELECT** on the *Inventory Data Entry form* to display a list of all Storage Locations, arranged within Locations and Sublocations. MSDSpro can accommodate several thousand levels of Inventory Locations. An Inventory item can be assigned to any Location at any level.



- Click the plus sign (+) to the left of a Location name to display its Sublocations.
 - Click the minus sign (-) to the left of a Location name to hide its Sublocations.
2. To add a Product as Inventory, highlight a Storage Location and click the **SELECT** button .

To select multiple locations at a single time, hold down the CTRL key and select each location. Once all of the desired locations are highlighted, click on the **SELECT** button. Once selected, a Location will appear as **bold** in the Location list.

3. Click on the **DONE** button to finish adding the Products as Inventory.

Product Data Entry Form - Ingredient Tab

The **Ingredient tab** displays the current Ingredients for this Product. An unlimited number of Ingredients may exist for each Product.

- Click the **ADD** button to create a new Ingredient record.
- Click the **DELETE** button to remove a highlighted Ingredient record.
- Double-click an Ingredient to modify the record.

EHS	CAS Number	Ingredient Name	Weight %	Min Weight %	Max Weight %
No	100-25-4	p-Dinitrobenzene	35	0.00	0.00
No	100-47-0	Benzonitrile	20	0.00	0.00
No	10022-70-5	Sodium hypochlorite	15	0.00	0.00

Indicate if Chemical is Trade Secret
(Printing is restricted on MSDS)

To view the list of CAS Numbers and associated Chemical records, click the Select button.

A list will appear listing all CAS Numbers in the Chemical Table. If the CAS Number is not found, the Administrator must enter the new listing in the Chemical Table (see *Chemicals in Data Access*).

Product Data Entry Form - Ingredient Tab (cont'd)

Ordering Ingredients:

MSDSpro administrators have the ability to list ingredients in any order they desire. By default, ingredients are listed in descending order by weight percent. Checking the Order Manually checkbox allows MSDSpro administrators to list ingredients in any order they desire.

To change the order of ingredients:

1. Place a check in the Order Manually checkbox.
2. Click on the first ingredient whose position is to be changed.
3. Click on the MOVE UP or MOVE DOWN buttons to move the selected ingredient up or down the list.
4. Repeat this process until the ingredients are listed in the order desired.

EHS	CAS Number	Ingredient Name	Weight %	Min Weight %	Max Weight %
No	100-25-4	p-Dinitrobenzene	35	0.00	0.00
No	100-47-0	Benzonitrile	20	0.00	0.00
No	10022-70-5	Sodium hypochlorite	15	0.00	0.00

Product Data Entry Form - PPE & Hazards Tab

The **PPE & Hazards tab** displays the current PPE and Hazards for this Product. Click all Hazard or PPE flags that apply to this Product.

Selections made here will be visible from the *Product Hazard Summary* report.

The screenshot shows a software window titled "Product: 7 of 23" with a tabbed interface. The "PPE & Hazards" tab is active, displaying the following information:

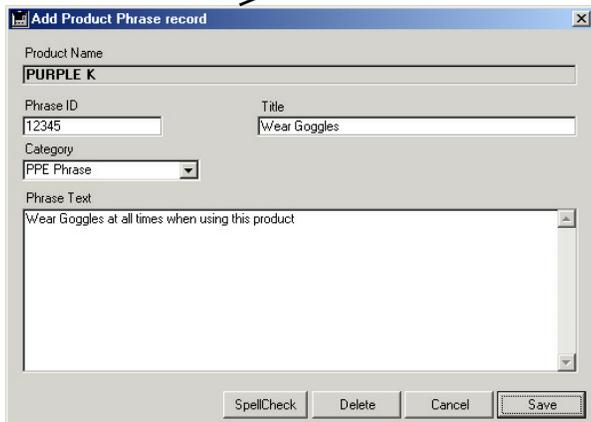
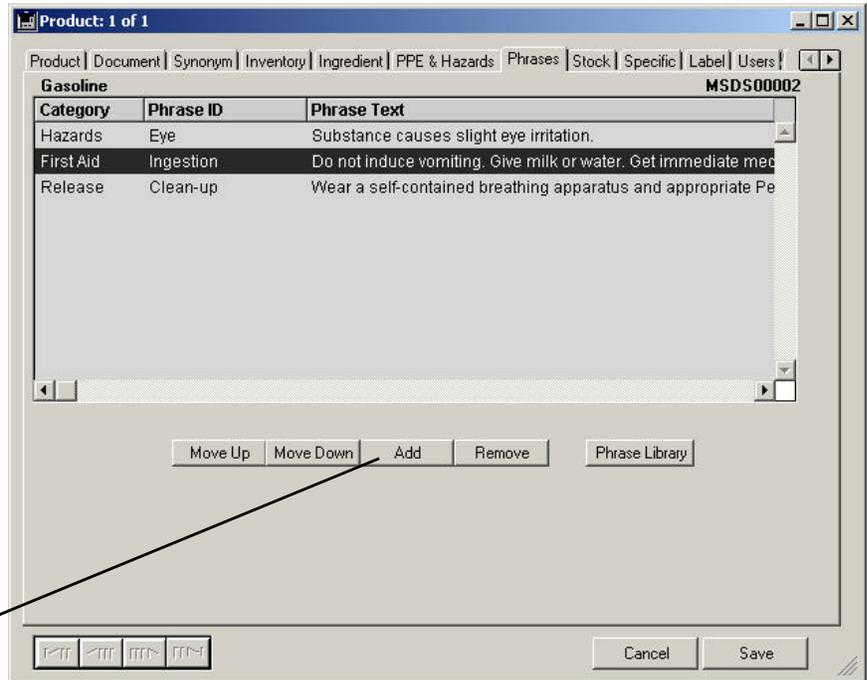
- Product Name:** FERRIC NITRATE
- Product ID:** 0007
- PPE:**
 - Gloves
 - Goggles
 - Face Shield
 - Apron
 - Respirator
- Health Hazards:**
 - No Hazard
 - Toxic
 - Highly Toxic
 - Reproductive Toxin
 - Irritant
 - Corrosive
 - Sensitizer
 - Carcinogen
 - Acute
 - Chronic
- Physical Hazards:**
 - No Physical Hazard
 - Combustible Liquid
 - Compressed Gas
 - Oxidizer
 - Flammable
 - Explosive
 - Pyrophoric
 - Organic Peroxide
 - Water Reactive
 - Unstable/Reactive
- Route of Entry:**
 - Inhalation
 - Ingestion
 - Skin or Eye Contact
 - Skin Absorption
- Target Organs & Effects:**
 - Lungs
 - Heart
 - Kidney
 - Eyes
 - Skin
 - Prostate
 - Blood
 - Liver
 - Bone
 - Central Nervous System
 - Cardiovascular system
 - Mucous Membranes
 - Autonomic Nervous System
 - Respiratory System
 - Effects Blood
 - Mutagen
 - Teratogen

Navigation buttons are located at the bottom left, and "Cancel" and "Save" buttons are at the bottom right.

Product Data Entry Form - Phrases Tab

The **Phrases tab** displays the current Phrase Library records that are associated with this Product. An unlimited number of Phrase records may exist for each Product.

- Click the **ADD** button to create a new Phrase record.
- Click the **DELETE** button to remove a highlighted Phrase record.
- Double-click a Phrase record to modify the record.
- Click the **PHRASE LIBRARY** button to drag and drop phrases directly into the product record.



Product Data Entry Form - Phrases Tab (cont'd)

Ordering Phrases

MSDSpro administrators have the ability to list phrases in any order they desire.

To change the order of phrases:

1. Click on the first ingredient whose position is to be changed.
2. Click on the MOVE UP or MOVE DOWN buttons to move the selected ingredient up or down the list.
3. Repeat this process until the phrases are listed in the order desired.

The screenshot shows a software window titled "Product: 1 of 1" with a menu bar containing "Product", "Document", "Synonym", "Inventory", "Ingredient", "PPE & Hazards", "Phrases", "Stock", "Specific", "Label", and "Users". The "Phrases" tab is active, displaying data for "Gasoline" (MSDS00002). The data is presented in a table with three columns: "Category", "Phrase ID", and "Phrase Text".

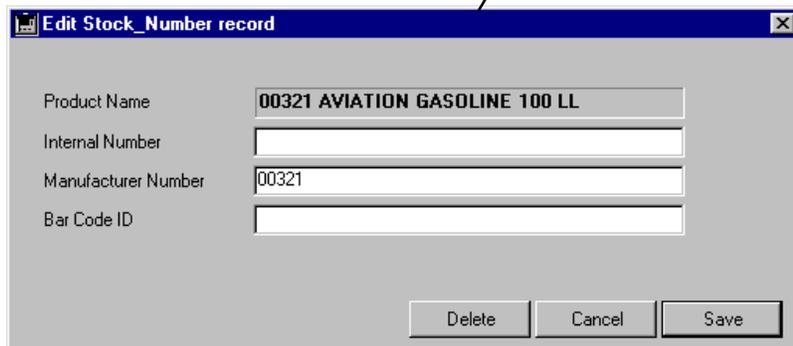
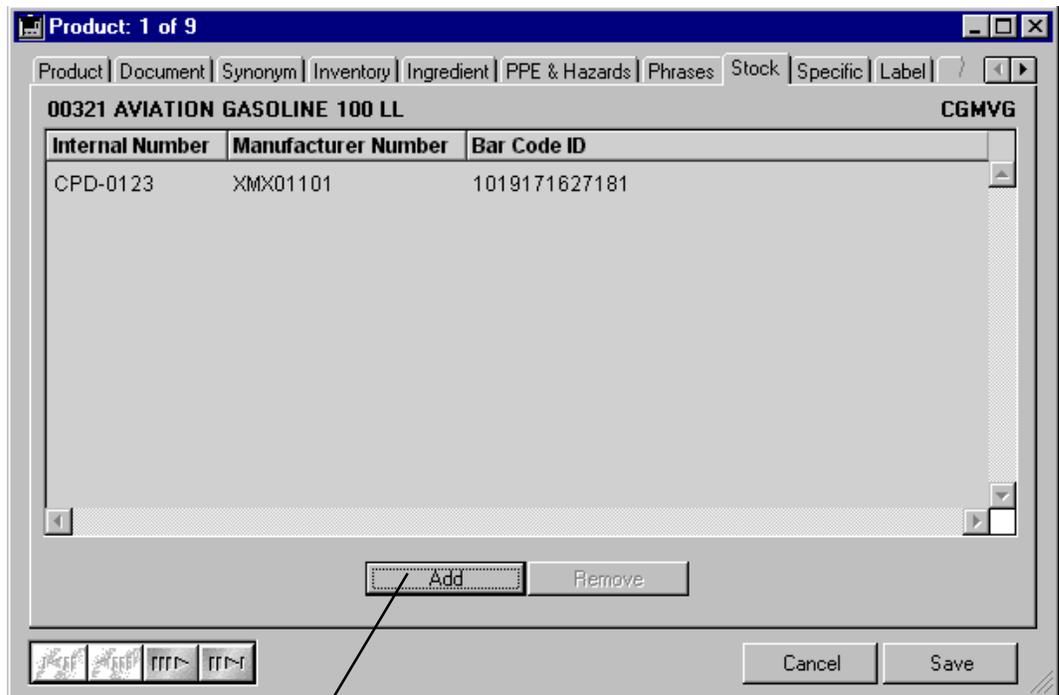
Category	Phrase ID	Phrase Text
Hazards	Eye	Substance causes slight eye irritation.
First Aid	Ingestion	Do not induce vomiting. Give milk or water. Get immediate medical attention.
Release	Clean-up	Wear a self-contained breathing apparatus and appropriate PPE.

Below the table, there are five buttons: "Move Up", "Move Down", "Add", "Remove", and "Phrase Library". At the bottom of the window, there are four small icons on the left and "Cancel" and "Save" buttons on the right.

Product Data Entry Form - Stock Number Tab

The **Stock Number tab** displays the current Stock Numbers for this Product. An unlimited number of Stock Numbers may exist for each Product. There can be an internal Stock number entered, as well as a manufacturer Stock Number (which can use the same Stock Number record) and a Bar Code ID.

- Click the **ADD** button to create a new Stock Number record.
- Click the **DELETE** button to remove a highlighted Stock Number record.
- Double-click a Stock Number to modify the record.



Product Data Entry Form - Specific Tab

The **Specific tab** displays the specific information relating to this Product record.

The Definable Fields are defined by the DBA in the *Preferences* area, and are completely customizable for your installed version of MSDSpro. Changes made are retained in your local data file for future use.

Product: 1 of 9

Product | Document | Synonym | Inventory | Ingredient | PPE & Hazards | Phrases | Stock | Specific | Label

00321 AVIATION GASOLINE 100 LL CGMVG

Description: AvGas for use in Turbo shop Product Owner: OPMS

Notes

Definable Fields

Bob's no updater	<input type="checkbox"/>	Alert	<input checked="" type="checkbox"/>
EHS Approved	KJP 01/07/2001	Amount 1/1/99	0.00
Ops Approved			
Mgmt Approved			

Navigation icons: [Back] [Forward] [Home] [Refresh] [Print] [Cancel] [Save]

Product Data Entry Form - Label Tab

The **Label tab** displays the current NFPA or HMIS hazard rating for this Product. Either the NFPA or the HMIS hazard rating can be used at any time, but when presenting the hazard rating to the end user, the use of the NFPA rating will default if both are specified.

1. Click **NFPA** or **HMIS** to allow entry into the hazard rating fields for the appropriate type of hazard.
2. Select the NFPA or HMIS hazard ratings from the pull-down lists.
3. Click **CREATE LABEL** to create a container label using blank or preprinted forms.

The screenshot shows a software window titled "Product: 7 of 23" with a tabbed interface. The "Label" tab is active, displaying the product name "FERRIC NITRATE" and the ID "0007". The form is divided into two main sections: "NFPA Rating" and "HMIS Rating".

NFPA Rating Section:

- Checkboxes for "NFPA Rating" and "HMIS Rating" are both checked.
- NFPA Health: 1
- NFPA Fire: 0
- NFPA Reactivity: 0
- NFPA Special: OXIDIZER

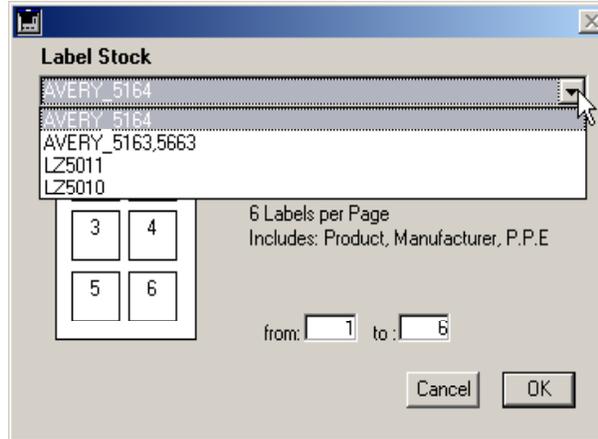
HMIS Rating Section:

- HMIS Health: 1
- HMIS Fire: 0
- HMIS Reactivity: 0
- HMIS Special: (empty field)

At the bottom of the form, there is a "UN Number" field containing "0". Two "Create Label" buttons are present, one under each rating section. A tooltip "Print Labels using NFPA or HMIS format" is visible over the "Create Label" button under the NFPA section. Navigation and control buttons (Back, Forward, Cancel, Save) are located at the bottom of the window.

Printing Labels for a Specific Product

1. Click CREATE LABEL to select a label style.



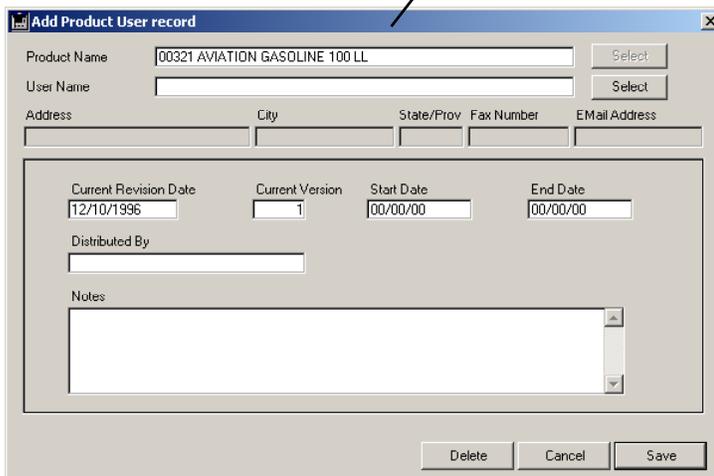
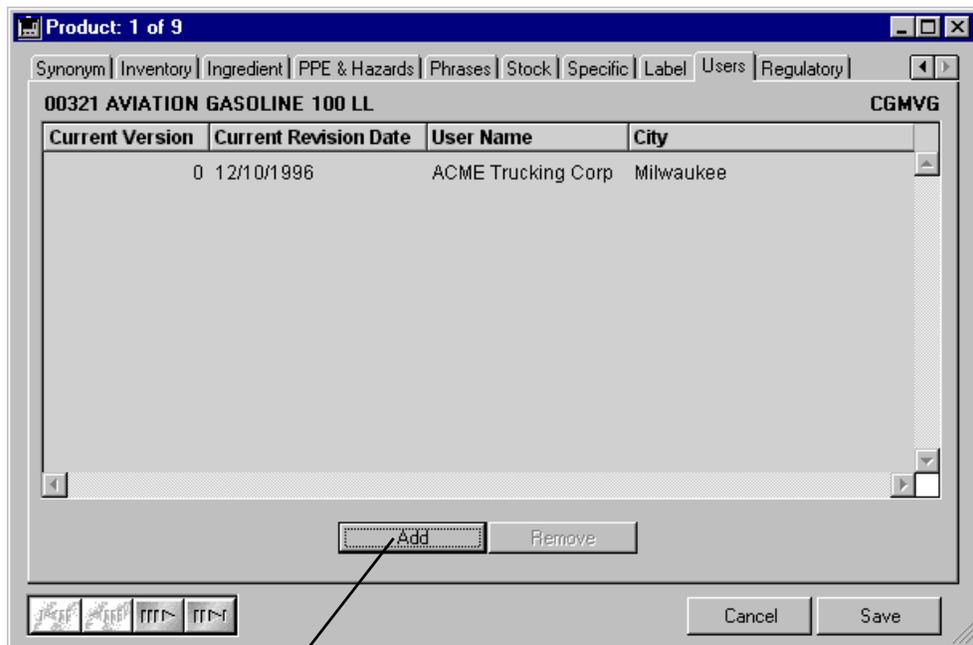
2. **Select Label Style.**
Some labels have pre-printed stock, others print on plain stock. Use the descriptions and sock numbers to select the correct label.
3. **Select the labels on the page to print.**
4. **Click OK.**

Product Data Entry Form - Users Tab

The **Users tab** displays the currently assigned *Product Users*.

Product Users can have associated distribution information, which streamlines the update process for those users of specific products. For example, fax number, mailing address or e-mail address can be utilized to automatically update Product Users when new updates occur to the MSDS document.

- Click the **ADD** button to create a new Product User record.
- Click the **DELETE** button to remove a highlighted Product User record.
- Double-click a Product User to modify the record.



Product Data Entry Form - Regulatory Tab

The **Regulatory** tab displays the associated SARA Report codes. These codes are required if SARA reporting is utilized within MSDSpro.

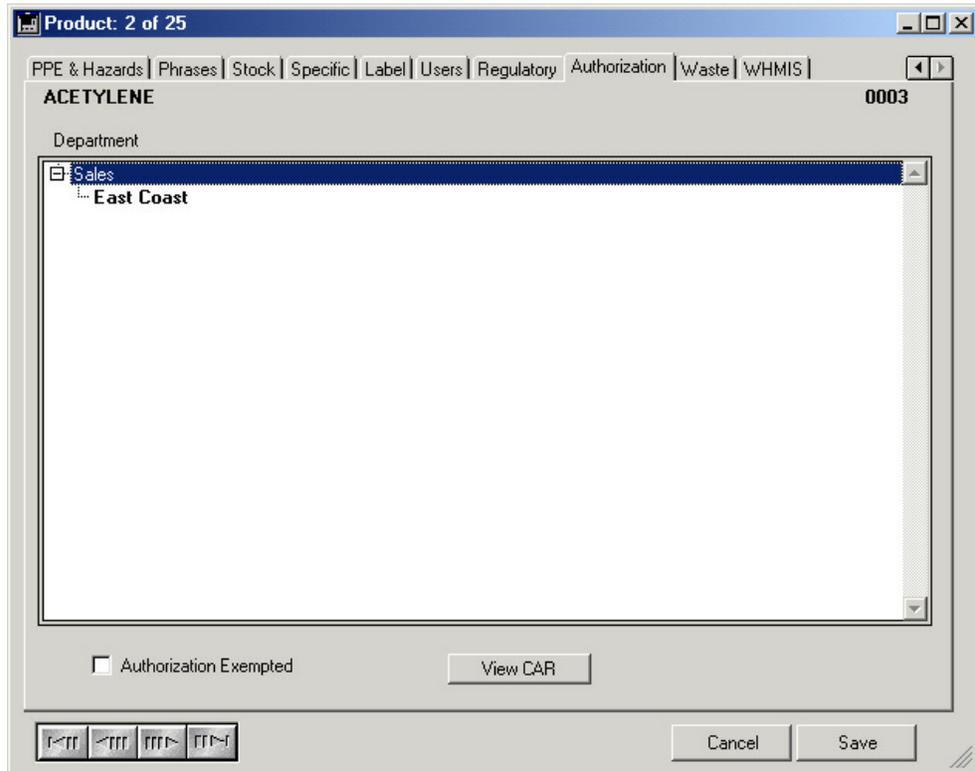
SARA Reporting is an optional and powerful function available within MSDSpro, and may not be required for the purposes of your organization.

The screenshot shows a software window titled "Product: 18 of 25" with a tabbed interface. The "Regulatory" tab is active, showing the product name "PURPLE K" and the number "0015". The "SARA Report Codes" section contains five checkboxes: SARA Fire, SARA Release, SARA Reactivity, SARA Acute, and SARA Chronic, all of which are currently unchecked. Below this is an "Import Source" dropdown menu, followed by "Trademarked" and "TDG" checkboxes, both unchecked. A large empty text area is labeled "Class of Transportation". At the bottom of the window are navigation buttons and "Cancel" and "Save" buttons.

- The Import Source pull down menu allows the MSDSpro Administrator to indicate whether this product was purchased from inside or outside of Canada or manufactured onsite.
- The Trademarked checkbox indicates if this product is trademarked by the owner company.
- The TDG checkbox indicates if this product is regulated under the Canadian Dangerous Goods Transportation Act.
- The Class of Transportation field allows for the entry of additional information relating to proper procedures governing transportation of the product.

Product Data Entry Form - Authorization Tab

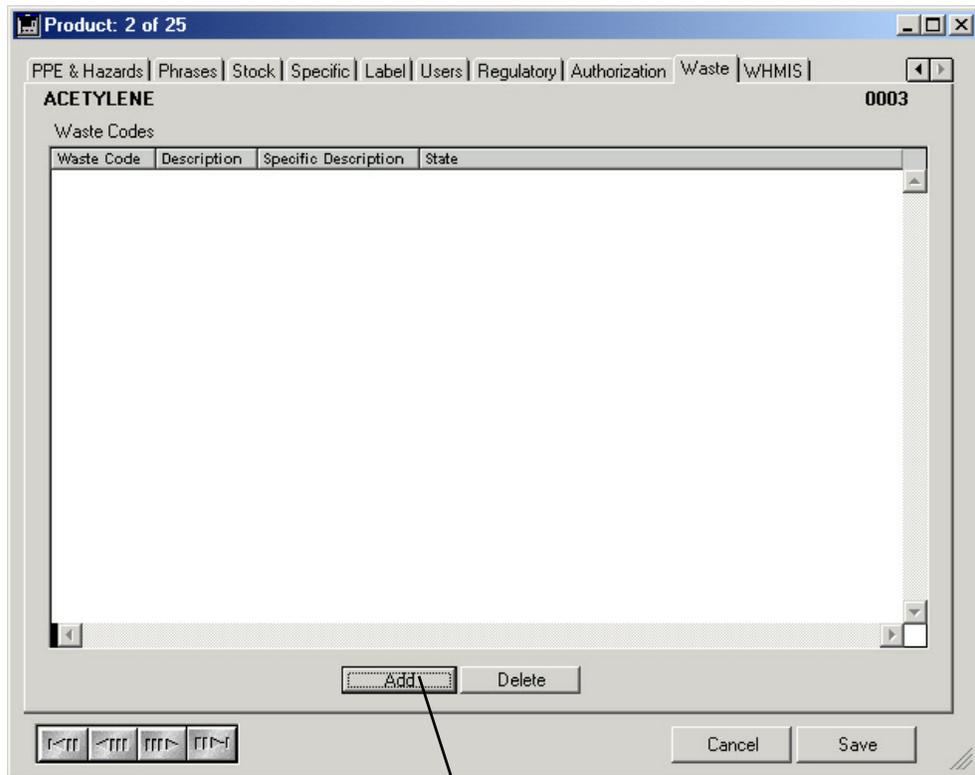
The **Authorization tab** displays the departments currently authorized to use the product.



- Check the **Authorization Exempted** checkbox if this product does not require a **Chemical Authorization Request (C.A.R.)** to be submitted before being used.
- Click on the **VIEW CAR** button to view the **C.A.R.** submitted by the highlighted department.

Product Data Entry Form - Waste Tab

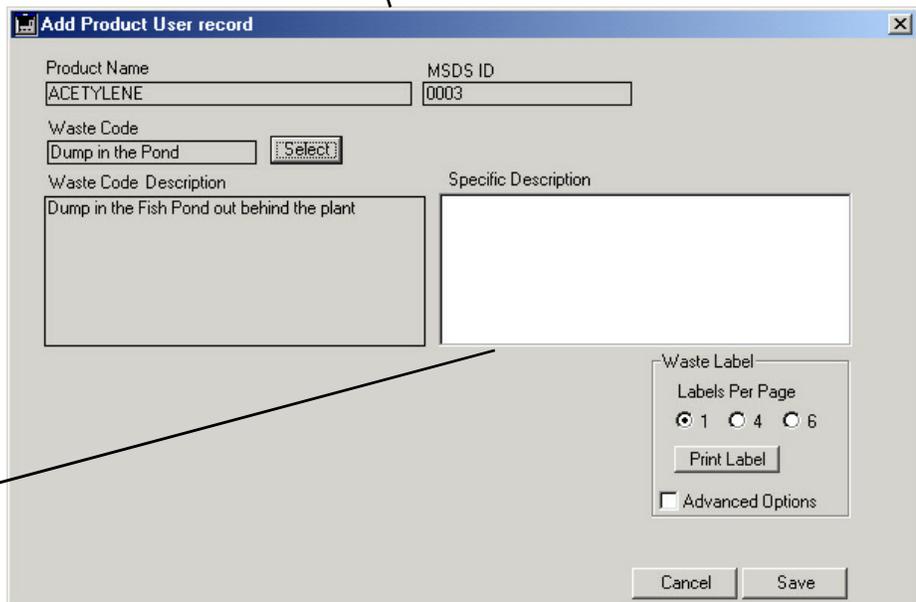
The **Waste tab** displays the Waste Codes associated with the product. A Waste Code describes the proper method for disposing of a product.



Clicking on the **ADD** button loads the *Add Product User Record Data Entry form*.

Click on the **SELECT** button to attach a Waste Code.

Enter additional information into the Specific Description field if desired.



Product Data Entry Form - WHMIS Tab

The WHMIS tab provides for the selection of WHMIS categories associated with the product and for the printing of WHMIS labels.

The screenshot shows a software window titled "Product: 2 of 25" with a tabbed interface. The active tab is "WHMIS". The main content area is titled "ACETYLENE" and "0003". It contains several sections:

- WHMIS Label:** A checked checkbox.
- Not a WHMIS product:** An unchecked checkbox.
- WHMIS Classifications:** A grid of checkboxes for WHMIS A through F, and WHMIS D1A through D3. WHMIS D1A and D1B are checked.
- Non Manufacturer Label:** An unchecked checkbox with a "Reason" text field below it.
- WHMIS Date of Non-Compliance:** A date field containing "00/00/00".
- Supplier Label:** A section containing:
 - "Label Revision" field with value "0".
 - "Labels Per Page" radio buttons for 1 (selected), 4, and 6.
 - Radio buttons for "WHMIS" (selected) and "Non-WHMIS".
 - "Advanced Options" checkbox (unchecked).
 - "Print Label" button.
- Recommended Storage Container:** An empty text field.

At the bottom of the window are navigation buttons (back, forward, etc.) and "Cancel" and "Save" buttons.

- If this product is not required to carry a WHMIS label, check the Not a WHMIS product checkbox.
- If the product is covered under WHMIS, check the WHMIS label checkbox and check the WHMIS classification checkboxes that apply to this product.
- Select the Non manufacturer checkbox if the WHMIS information comes from a source other than the product's manufacturer.
- Enter into the WHMIS date of Non-Compliance field the date WHMIS information from a source other than the product's manufacturer was entered into the product record.

Product Data Entry Form - WHMIS Tab (Cont'd)

To print a WHMIS label:

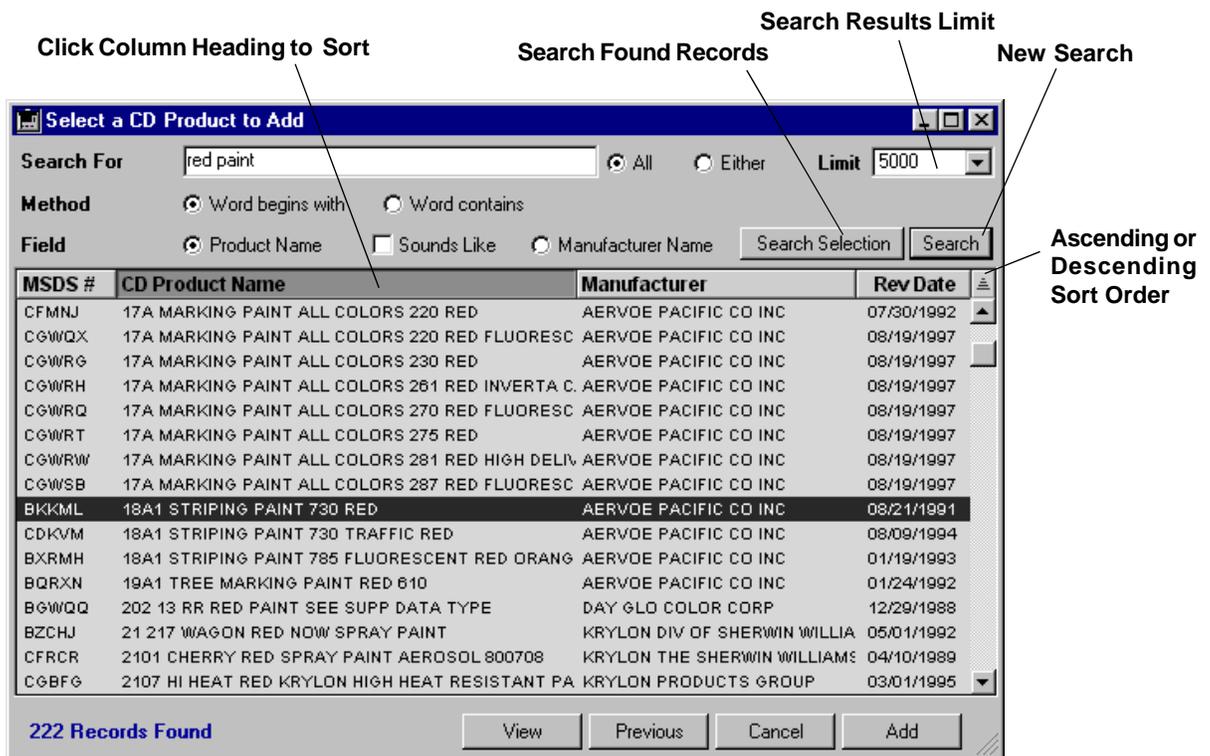
1. Enter into the Label Revision field the number of times that this label has been revised since it was first created.
2. Select the number of labels that will be printed on each page.
3. Select whether the labels to be printed will be either WHMIS or non-WHMIS labels.
4. Check the Advanced Options checkbox to configure additional options.
5. Click on the PRINT LABEL button to print the label(s).

Adding ANSI MSDS Documents from the MSDSpro CD

In order for MSDSpro to access the CD Library, the MSDSpro CD must be in the server CD-ROM drive before the MSDSpro application is started. MSDSs in the MSDSpro CD Library are formatted as ANSI text documents. To locate the desired MSDS in the CD Library and attach it to the product record, click the CD-ROM button on the *Product Data Entry form Product tab*.



The Select a CD product to add output form appears.



- The Search For entry area is used to specify keywords used in the CD Product Name and Manufacturer search.

Typing more than one word will search for CD Products that either contain *all* words entered, or *either* of the words entered, depending on the method chosen.

Adding ANSI MSDS Documents from the MSDSpro CD (cont'd)

Click Column Heading to Sort

Search Found Records

Search Results Limit

New Search

Ascending or Descending Sort Order

MSDS #	CD Product Name	Manufacturer	Rev Date
CFMNJ	17A MARKING PAINT ALL COLORS 220 RED	AERVOE PACIFIC CO INC	07/30/1992
CGWQX	17A MARKING PAINT ALL COLORS 220 RED FLUORESC	AERVOE PACIFIC CO INC	08/19/1997
CGWRG	17A MARKING PAINT ALL COLORS 230 RED	AERVOE PACIFIC CO INC	08/19/1997
CGWRH	17A MARKING PAINT ALL COLORS 261 RED INVERTA C.	AERVOE PACIFIC CO INC	08/19/1997
CGWRQ	17A MARKING PAINT ALL COLORS 270 RED FLUORESC	AERVOE PACIFIC CO INC	08/19/1997
CGWRT	17A MARKING PAINT ALL COLORS 275 RED	AERVOE PACIFIC CO INC	08/19/1997
CGWRW	17A MARKING PAINT ALL COLORS 281 RED HIGH DELIV	AERVOE PACIFIC CO INC	08/19/1997
CGWSB	17A MARKING PAINT ALL COLORS 287 RED FLUORESC	AERVOE PACIFIC CO INC	08/19/1997
BKKML	18A1 STRIPING PAINT 730 RED	AERVOE PACIFIC CO INC	08/21/1991
CDKVM	18A1 STRIPING PAINT 730 TRAFFIC RED	AERVOE PACIFIC CO INC	08/09/1994
BXRMH	18A1 STRIPING PAINT 785 FLUORESCENT RED ORANG	AERVOE PACIFIC CO INC	01/19/1993
BQRXN	19A1 TREE MARKING PAINT RED 610	AERVOE PACIFIC CO INC	01/24/1992
BGWQQ	202 13 RR RED PAINT SEE SUPP DATA TYPE	DAY GLO COLOR CORP	12/29/1988
BZCHJ	21 217 WAGON RED NOW SPRAY PAINT	KRYLON DIV OF SHERWIN WILLIA	05/01/1992
CFRCR	2101 CHERRY RED SPRAY PAINT AEROSOL 800708	KRYLON THE SHERWIN WILLIAM	04/10/1989
CGBFG	2107 HI HEAT RED KRYLON HIGH HEAT RESISTANT PA	KRYLON PRODUCTS GROUP	03/01/1995

222 Records Found

View Previous Cancel Add

- The **Method** choice allows a search that will find word(s) in the Product Name that begin with the specified word(s), or word(s) that are contained within a larger word string.

Note: choosing the *Word begins with* is a much faster search than *Word contains*.

- The **Field** choice allows a search for a *Product Name* that matches the specified word(s) typed (optionally using the *Sounds Like* phonetic search), or a search for *Manufacturer Name* that matches the specified word(s).
- After clicking the **SEARCH** button, a resulting list of matches will appear (limited to the selected Limit pull-down choice).
- Using **SEARCH SELECTION** will narrow the search within the currently found records only.

For example, searching for “red paint” first, then specifying a Manufacturer Name of “krylon” and clicking **SEARCH SELECTION** will search the currently found “red paint” records for only the records belonging to the new manufacturer specified.

- Click **PREVIOUS** to restore the previous records.
- Simply select the Product and click the **ADD** button to add it as a new Product and ANSI MSDS, or double-click the Product to preview the document (previewing the document does not save it within MSDSpro).

Company

The Company table stores all data for Manufacturers and Suppliers. A company is entered only once. The record is then referenced by the Product table, where many Products may exist that relate to only one Company record.

A modification to the Company record is then immediately available to Products that are related to the Company record.

Note: In Versions prior to 4.1 this table was called Manufacturer.

Company Output Form

Company Name	Address	City	State/Prov	Postal Code
AIR PRODUCTS	259 Radnor-Chester Ro	Radnor	PA	19087-5240
ANSUL	One Stanton Street	Marinette	WI	54143-2542
CHEVRON	6001 Bollinger Canyon	San Ramon	CA	94583
EM SCIENCE	480 Democrat Road	Gibbstown	NJ	08027
HUNTERS SPECIALTIES INC	6000 HUNTINGTON C	CEDAR RAPIDS	IA	52402
J.T. BAKER	222 Red School Lane	Phillipsburg	NJ	08865
LINCOLN	22801 St. Claire Avenu	Cleveland	OH	44117
LOCTITE	1001 Trout Brook Cross	Rocky Hill	CT	06067
MAGNAFLUX	3624 West Lake Avenu	Glenview	IL	60025
MALLINCKRODT	222 Red School Lane	Phillipsburg	PA	08865
MG INDUSTRIES	3 Great Valley Parkway	Malvern	PA	19355
PHILLIPS 66 COMPANY	P.O. Box 25376	Santa Ana	CA	92799
S. C. JOHNSON & SON, INC.	1 Webster St.	Brantford	ONTARIO	N3T 5R1
TEXACO REFINING & MARKETING IN	Box: 7812	UNIVERSAL CIT	CA	91608
ULTRAMAR, INC.	P.O. BOX 93102	LONG BEACH	CA	90809-3102
WD-40	1061 Cudahy	San Diego	CA	92110
WILLIAMS ALASKA PETROLEUM, INC.	1100 H & H Lane	North Pole	AK	99705

Buttons: New, Delete, All, Search, Sort, Close

Company Data Entry Form

The Company name is required to be entered before saving the record.

- Enter the electronic contact information for each Company to take advantage of efficiencies, such as Fax number, E-mail address, and Internet URL locations.

The screenshot shows a software window titled "Company: 2 of 17". The form is organized into several sections:

- Company Name:** A text box containing "ANSUL".
- Company Revision Date:** A date field containing "00/00/00".
- Address:** A text box containing "One Stanton Street".
- City:** A text box containing "Marinette".
- State/Prov:** A text box containing "WI".
- Postal Code:** A text box containing "54143-2542".
- Country:** A text box containing "U.S.A.". There is also a "PO Box" field which is currently empty.
- Phone Number:** A text box containing "(715)735-7411".
- Emergency Phone:** A text box containing "(800)424-9300".
- Fax Number:** An empty text box.
- Formatting Options:** Three checkboxes labeled "Disable Formatting" are present, one for each of the Phone Number, Emergency Phone, and Fax Number fields.
- Contact Name:** An empty text box.
- Local Vendor:** An empty text box.
- MSDS E-Mail Address:** An empty text box.
- MSDS URL:** A text box containing "http://www.ansul.com/docs/msds/MSDS%20table%20" with a "Launch" button to its right.
- Website URL:** A text box containing "http://www.ansul.com" with a "Launch" button to its right.
- Notes:** A large empty text area with a vertical scrollbar.
- Navigation and Action Buttons:** At the bottom left are four navigation buttons (back, forward, etc.). At the bottom right are "Delete", "Cancel", and "Save" buttons.

Locations

The *Modify Locations* window allows modification of existing Location records and association of various hierarchies within each Location. Sublocations may be several thousand levels deep within each Location.

Adding a Location

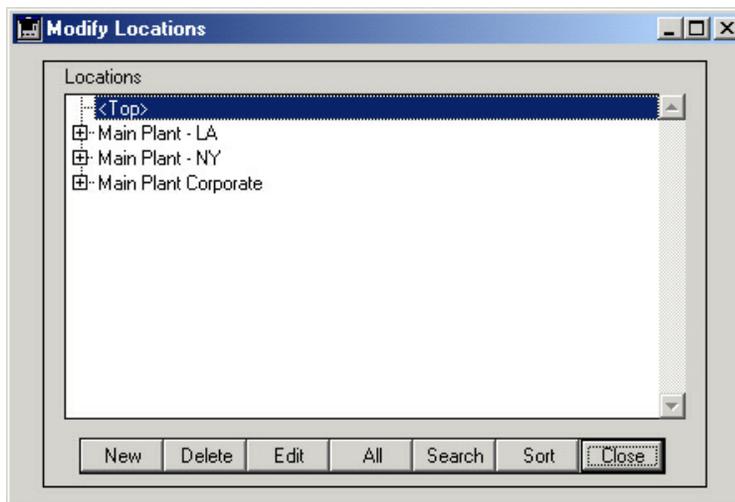
1. Click the **ADMIN** button on the Floating Toolbar.

The **Data Access tab** of the *Admin Control Panel* is presented.



2. Select **Locations**.
3. Click the **SELECT** button.

The *Modify Locations* screen is displayed.



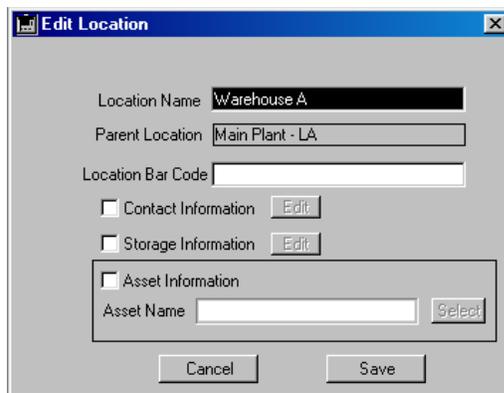
Adding a Location (Cont'd)

4. Click on the Location to add a Location to.

If there is a plus sign to the left of any of the existing Locations, you can click on it and drill down to the next level. Click on <TOP> to add a top level Location.

5. Click the NEW button.

The *Edit Location* screen is presented.



The screenshot shows a window titled "Edit Location" with a close button in the top right corner. The window contains the following fields and controls:

- Location Name: Warehouse A
- Parent Location: Main Plant - LA
- Location Bar Code: (empty)
- Contact Information Edit
- Storage Information Edit
- Asset Information
- Asset Name: (empty) Select
- Cancel Save

6. Type the name of the new level in the LOCATION NAME field.

7. Click the SAVE button.

You are returned to the *Modify Locations* screen.

8. Click CLOSE to exit.

This information also displays when you are in the *Inventory tab* of a Product.

Editing a Location

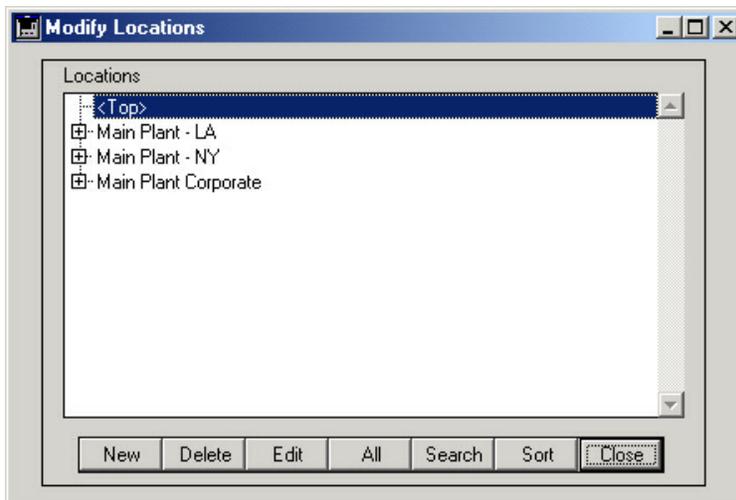
1. Click on the ADMIN button of the Floating Toolbar.

The **Data Access tab** of the *Admin Control Panel* is presented.



2. Select Locations.
3. Click the SELECT button.

The *Modify Locations* screen is displayed.



Editing a Location (Cont'd)

4. Click on the Location to edit.

If there is a plus sign to the left of any of the existing Locations, you can click on it and drill down to the next level. A Location can be moved from one level to another by clicking and dragging it.

5. Click the EDIT button.

The *Edit Location* screen is presented.

6. Edit the Location name, the Location Bar Code, who to contact in an emergency, how to store the material, Asset Information and Asset Name.

The Location Bar Code is for scanning and tracking stored material and relevant MSDS information.

7. Click hide from Web if web users should not see this location and related inventory.

8. Inventory review Date and Reviewed by are the last time inventory at this location was reviewed.

9. Click the SAVE button.

Deleting a Location

1. Click on the ADMIN button of the Floating Toolbar.

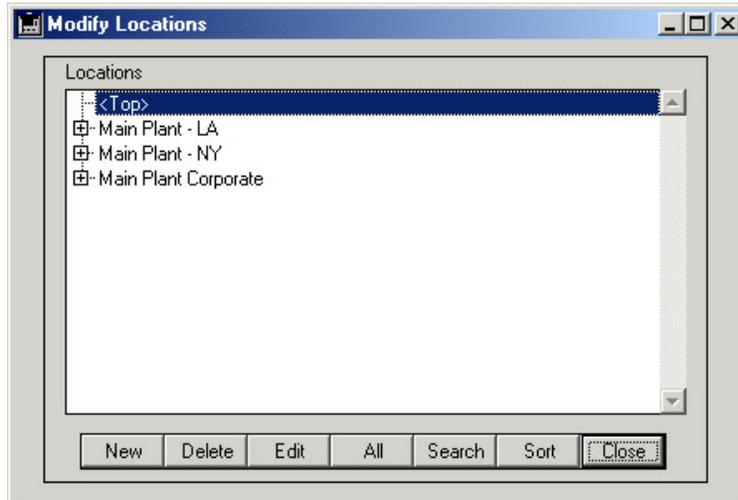
The **Data Access tab** of the *Admin Control Panel* is presented.

2. Select Locations.

3. Click the SELECT button.

The *Modify Locations* screen is displayed.

Deleting a Location (Cont'd)



4. Click on the Location you want to delete.

If there is a plus sign to the left of any of the existing Locations, you can click on it and drill down to the next level.

5. Click the DELETE button.
6. Confirm the delete action.

The Location and all related Inventory records are deleted.

7. Click the CLOSE button.

Moving Locations

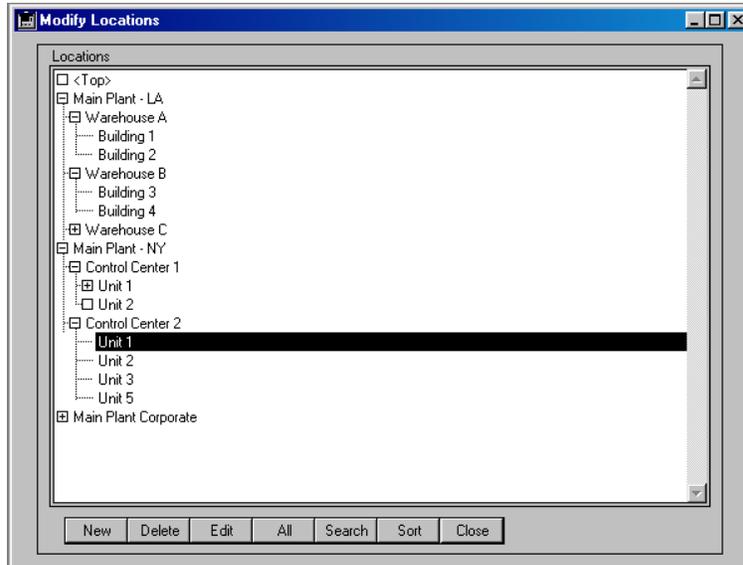
- 1 Click on the ADMIN button of the Floating Toolbar.

The **Data Access tab** of the *Admin Control Panel* is presented.

2. Select Locations.
3. Click the SELECT button.

The *Modify Locations* screen is displayed.

Moving Locations (Cont'd)



4. Select the Location you want to move

If there is a plus sign to the left of a Location, you can click on it to drill down to the next level.

5. Drag the Location to move it from one level to another

Inventory

The Inventory section allows access to Inventory records, the records that identify which products are stored at which locations.

Accessing Inventory Records

1. Click the ADMIN button on the Floating Toolbar.

The **Data Access tab** of the *Admin Control Panel* is presented.



2. Select Inventory.
3. Click the SELECT button.

The Select Inventory View screen appears



To access Inventory information listed by Product Name, select *Inventory by Product*.

Inventory by Product Output Form

Choosing Inventory by Product will display the *Inventory by Product Output form*. By double-clicking on one of the listed Product records, the inventory locations for that given product are listed in the *Inventory by Product Data Entry form*.



MSDS ID	Product Name	Manufacturer Name
CGMVG	00321 AVIATION GASOLINE 100 LL	Texaco Refining & Marketing, Inc.
CBYQP	00482 LEAF GREEN AEROSOL TOUCH UP PAIN	Hunters Specialties Inc.
MSDS00001	Battery Fluid, Acid 10% - 51%	Colonial Chemical Company
MSDS00004	C4822A/C4847A/C4874A/C4892A	Hewlett-Packard Company
MSDS00006	CAM2 Soluble Oil	CAM2 Oil Products Company
MSDS00002	Chevron Machine Oil R&D ISO 150	Chevron USA Products Company
MSDS00005	Nite White® Excel Take Home Tooth Whitener	Discus Dental, Inc
MSDS00003	Phosgene	DOC Gases

Inventory by Product Data Entry Form

The *Inventory by Product Data Entry form* displays one Product and all of its associated Inventory records.

- The Start Date field displays the date the Product was first stored at this Location.
- The Maximum Amount Daily field lists the maximum amount of the Product that has ever been stored at a Location.
- Click the ADD button to add the Product to any Location.
- Click the DELETE button to delete the Product from the selected Location.
- Click the EDIT button or Double-click a Location to modify information on the selected Location.

Clicking on the **ADD** or **EDIT** buttons loads the *Inventory Data Entry form*.

Inventory Data Entry Form

The *Inventory Data Entry form* is where Products are added as Inventory to a Location. Additional information related to Product Inventory and the *SARA Title III (Tier 2)* report is also added or modified on this form. The *Inventory Data Entry form* contains three internal tabs; the **Physical Inventory tab**, the **SARA Inventory tab** and the **SARA Containers tab**.

The screenshot shows the 'Edit Inventory record' window. Callout boxes provide the following instructions:

- Click here to view a list of all existing locations (pointing to the Storage Name field's Select button)
- Click here to view a list of all existing products (pointing to the Product Name field's Select button)
- Enter start and end dates here (pointing to the Start Date and End Date fields)
- Check here to flag the product as Non-Periodic (pointing to the Non Periodic checkbox)
- Enter additional information about Product Inventory here (pointing to the Notes text area)

The form fields include: Product Name (PURPLE K), Storage Name (Building 2), Description, Storage Location (Main Plant - LA > Warehouse A > Building 2), Physical Inventory | SARA Inventory | SARA Containers tabs, Start Date (01/30/2000), End Date (00/00/00), Non Periodic checkbox, Temperature (0), Inventory Person, Solid/Liquid/Gas checkboxes, Disposal Method, Density lbs/ (0), and Specific Gravity (0). Buttons for Delete, Cancel, and Save are at the bottom.

The Physical Inventory tab:

The **Physical Inventory tab** is where all the information relating to storing the Product at this Location is entered.

- Click the **SELECT** button to the right of the **Product Name** field, a list of all **Product records** in the **MSDSpro** database will appear.

From this list, select the Product to be added as Inventory. If a Product does not appear in the listing, the Product has not yet been created within MSDSpro.

- Click the **SELECT** button to the right of the **Storage Name** field and a list of all **Storage Locations** will appear.

From this list, select the Location to which the Product is to be added as Inventory. If a Location does not appear in the listing, the Location has not yet been created within MSDSpro. Locations are covered on pp. 4-43 through 4-48.

Inventory Data Entry Form (Cont'd)

- Enter into the Start and End Date fields the dates that the Product started and stopped being stored at that Location.
- Check the Non-Periodic checkbox if the Product should be included in the *SARA Title III (Tier 2)* regardless of start and end dates.
- The Temperature field lists at what temperature the Product is stored.

The Temperature field is usually only used if the Product will be stored in a chilled or heated state. For SARA reporting the containers have SARA codes related to temperature.

- Enter into the Inventory Person field the name of the individual responsible for tracking the inventory of the product at this location.
- The Solid, Liquid or Gas checkboxes list the state(s) of the Product.
- The Disposal Method field details how the Product will be discarded.
- The Notes field is used to enter additional information relating to Product Inventory.

Inventory Data Entry Form (cont'd)

The Sara Inventory tab:

The fields on the **SARA Inventory tab** are used in calculating Inventory quantities for the *SARA Title III (Tier 2)* report.

- Selecting the Containers radio button will set MSDSpro to automatically calculate the quantity of the Product stored at the selected Location.
- If the Manual Only radio button is selected, MSDSpro will not calculate Product quantities.

Use this option if the Product quantities are to be entered manually into MSDSpro.

- The Days on Site field lists the total number of days a Product has been stored at a Location.
- The Maximum Amount Daily field lists the maximum amount of the Product that has been stored at the specified Location.
- The Average Amount Daily field lists the average amount of the Product that has been stored as Inventory.
- The Inventory Type field gives information on how the Product is used.

Inventory Data Entry Form (cont'd)

The Sara Inventory tab (cont'd):

- **The SARA Report Usage Field controls whether MSDSpro should include this Product when a SARA Title III (Tier 2) report.**

By default MSDSpro will automatically will compare product quantities stored with minimum amounts required for inclusion in the *SARA Title III (Tier 2)* report. If this Product is to be included or excluded in the *SARA Title III (Tier 2)* report by default, select that option from this field.

The Sara Containers tab:

The fields on the **SARA Containers tab** report information relating to the physical containers that are used to store a Product as Inventory. Some of these fields are also used in calculating quantities for *SARA Title III (Tier 2)* reporting. MSDSpro can track a Product stored in many different types of containers at one Location. To begin entering information on the type of containers used to store a Product, click on the **ADD** button.

The screenshot shows the 'Edit Inventory record' window with the 'SARA Containers' tab selected. The window contains the following fields and sections:

- Product Name:** Aniline blue (with a 'Select' button)
- Storage Name:** Main Plant Corporate (with a 'Select' button)
- Description:** (empty)
- Storage Location:** Main Plant Corporate
- Physical Inventory | SARA Inventory | SARA Containers** (tabbed interface)
- Select Item:** A list box containing 'NA'.
- Item Number:** (empty)
- Responsible Person:** (empty) (with a 'Select' button)
- Start Date:** 00/00/00
- Number Containers:** 0
- Container Size:** 0
- Container Unit:** (dropdown menu)
- Expires Date:** 00/00/00
- SARA Codes:**
 - Container Type:** (dropdown menu)
 - Container Pressure:** (dropdown menu)
 - Container Temperature:** (dropdown menu)
- Container Properties:**
 - Days on Site:** 0
 - Current Amount:** 0
 - Max Amount:** 0
 - Average Amount:** 0
- Buttons:** Add, Delete, Delete, Cancel, Save

An arrow points to the 'Add' button with the text: "Click here to begin entering information on the type of containers used to store a Product".

- **The Item Number field stores an internal company code assigned to a Product for the purpose of tracking inventory.**

Inventory Data Entry Form (cont'd)

The Sara Containers tab (cont'd):

- **The Responsible Person field lists the name of the person responsible for tracking product inventory in the selected container type.**
- **The Start and Expires Date fields list the dates in which this product began and ceased being stored at this location in the selected container type.**
- **The Number of Containers field lists the quantity of containers that are used to store the Product as Inventory.**

For example, if a Product is stored at a Location in ten 55-gallon drums, the Number of Containers field should contain the number ten.

- **The Container Size field lists the size of each container.**

Using the previous example, the Container Size field should contain the number fifty-five.

- **The Container Unit field lists the units of weight or volume that the Inventory quantity is measured in.**

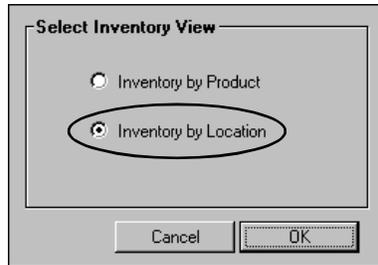
Using the previous example, the Container Unit field should contain the word gallons.

- **The Days on Site field lists the number of days that the product is stored as Inventory.**
- **The Current Amount field lists the current amount of the Product stored at the specified Location.**
- **The Maximum Amount field lists the maximum amount of the Product that has ever been stored at the specified Location.**
- **The Average Amount field lists the average amount of the Product that has been stored at the specified Location.**
- **The Container Type field lists the type of container used to store the Product.**
- **The Container Pressure field details whether the Product will be compressed, expanded or stored at the ambient pressure.**
- **The Container Temperature field details whether the product will be heated, chilled or stored at the ambient temperature.**

Inventory by Location

The Inventory section allows access to Inventory records (the records that link a Product to a Storage Location).

To access Inventory information listed by Location Name, select *Inventory by Location*:



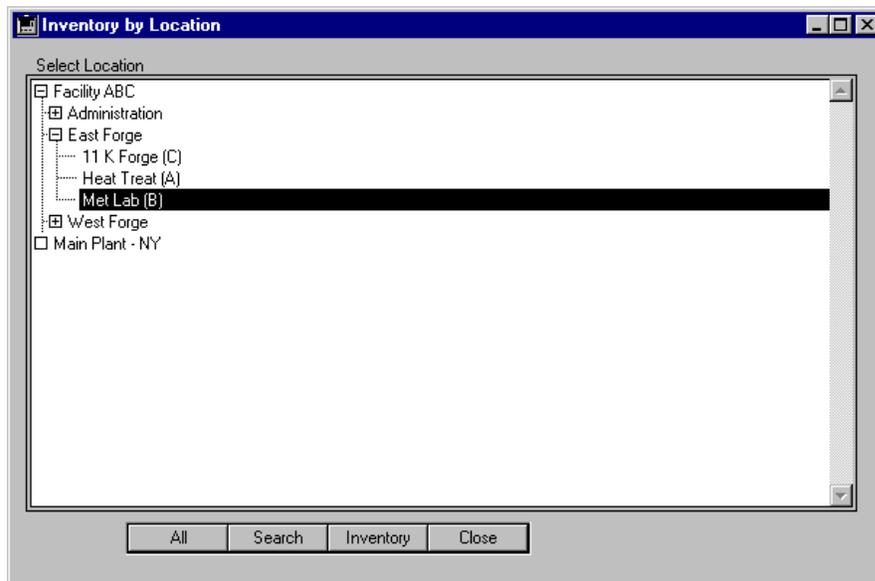
Choosing Inventory by Location will display the Inventory by Location display form.

Inventory by Location Display Form

To modify or view an Inventory record by using the *Inventory by Location* window:

1. **Select (highlight) the Location with associated Inventory to edit or view.**
2. **Click the INVENTORY button.**

The Inventory by Location *Data Entry form* is displayed



Inventory by Location Data Entry Form

The *Inventory by Location Data Entry* form displays one Storage Location and all of its associated Inventory records.

- Click the **ADD** button to add a new Inventory record.
- Click the **DELETE** button to delete a highlighted Inventory record.
- Double-click an Inventory record to modify it.
- Inventory review date and reviewed by are the last time inventory was revised at this location.

Inventory by Location: 1 of 1

Location Name: **Main Plant - NY**

Description: _____ Geographic Location: _____

Inventory Review Date: 00/00/00 Reviewed By: _____

Start Date	MSDS ID	Product Name	Company Name
00/00/00	0001	00321 AVIATION GASOLINE 100 LL	TEXACO REFINING & MARKETING IN

Buttons: Add, Remove, Cancel, Save

Add Inventory record

Product Name: _____ Select

Storage Name: Main Plant - NY Select

Description: _____ Storage Location: Main Plant - NY

Physical Inventory | SARA Inventory | SARA Containers

Start Date: 01/22/2004 End Date: 00/00/00 Non Periodic:

Temperature: 0

Inventory Person: _____

Solid: Liquid: Gas:

Disposal Method: _____

Density lbs/: _____ Specific Gravity: _____

Buttons: Delete, Cancel, Save

Double-clicking an existing Product Name displays the *Inventory Data Entry* form for edit.

Chemical

The Chemical table records information about Chemicals. Chemical CAS numbers are not considered unique. Two or more Chemical records may share the same CAS number if needed.

Chemical records contain information that is stored only once. Many Products may use each Chemical through the use of Ingredients (available within the Products *Data Entry form Ingredient tab.*)

Chemical Output Form

Chemical Name	CAS Number	EHS	TPQ Pounds
ETHYL BENZENE "96-2"	100-41-4	<input type="checkbox"/>	0
BUTANE	106-97-8	<input type="checkbox"/>	0
PROPYLENEGLYCOL MONOMETHYL ETHER ACETATE,	108-65-6	<input type="checkbox"/>	0
TOLUENE	108-88-3	<input type="checkbox"/>	0
HEXANE	110-54-3	<input type="checkbox"/>	0
2-BUTOXYETHANOL	111-76-2	<input type="checkbox"/>	0
SILICA, AMORPHOUS	112945-52-5	<input type="checkbox"/>	0
ETHYLENE, TETRAFLUORO-, POLYMER	116-14-3	<input type="checkbox"/>	0
CARBON DIOXIDE	124-38-9	<input type="checkbox"/>	0
Urea Hydrogen Peroxide	124-43-6	<input type="checkbox"/>	0
MOLYBDATE ORANGE	12656-85-8	<input type="checkbox"/>	0
XYLENE	1330-20-7	<input checked="" type="checkbox"/>	0
TITANIUM OXIDE	13463-67-7	<input type="checkbox"/>	0
POLYETHYLENE GLYCOL DIMETHACRYLATE	25852-47-5	<input checked="" type="checkbox"/>	0
N,N-DIALKYL TOLUIDINE	613-48-9	<input type="checkbox"/>	0
2-pyrrolidone	616-45-5	<input type="checkbox"/>	0
DIMETHYL POLYSILOXANE	63148-62-9	<input type="checkbox"/>	0
HYDROTREATED MIDDLE PETROLEUM DISTILLATE	64742-46-7	<input type="checkbox"/>	0
Distillates (petroleum), hydrotreated heavy naphenic	64742-52-5	<input type="checkbox"/>	0
Distillates (petroleum), hydrotreated light naphenic	64742-53-6	<input type="checkbox"/>	0

Buttons: New, Delete, All, Search, Sort, Close

Chemical Data Entry Form - Chemicals Tab

The **Chemicals tab** allows the CAS number to be entered for a Chemical Name, as well as EHS (Extremely Hazardous Substance), EHS TPQ, TSCA, Carcinogen, TLV ACGIH, OSHA PEL, and various SARA flags. CAS Number data entry is checked to verify that the CAS Number is valid.

Chemical Data Entry Form - Regulatory Flags Tab

The **Regulatory Flags tab** displays the federal and state qualifications for this Chemical.

Chemical Data Entry Form - Definable Fields Tab

The **Definable Fields tab** displays all fields created by MSDSpro Administrator(s) for use in the chemical record.

Chemical: 11 of 55

Chemicals | Regulatory Flags | Definable Fields | Products | Inventory

CAS Number: 1310-73-2

Chemical Name: Sodium hydroxide

Navigation: <<< << >> >>>

Buttons: Delete, Cancel, Save

Chemical Data Entry Form - Products Tab

The **Products tab** displays all Products which contain this Chemical as an Ingredient.

Chemical: 11 of 55

Chemicals | Regulatory Flags | Definable Fields | Products | Inventory

CAS Number: 1310-73-2

Chemical Name: Sodium hydroxide

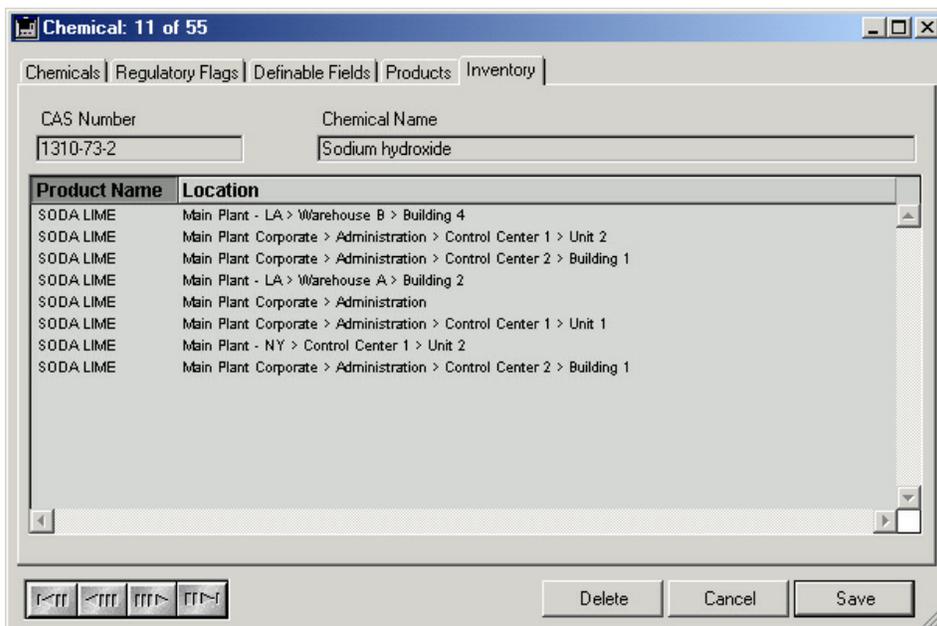
MSDS ID	Product Name	Company Name	Weight %
0017	SODA LIME	J.T. BAKER	< 2.00 %

Navigation: <<< << >> >>>

Buttons: Delete, Cancel, Save

Chemical Data Entry Form - Inventory Tab

The *Inventory tab* displays the locations where this Chemical is stored.



Containers

The Containers section stores information about the different types of containers used to store products as inventory.

Accessing Container Records

1. Click the ADMIN button on the Floating Toolbar.

The **Data Access tab** of the *Admin Control Panel* is presented.



2. Select Containers.
3. Click the SELECT button.

The Select Records screen appears.



3. Select whether to list all container records, search for container records or add new records.

Containers Output Form

Choosing List All Records from the Select Records screen will display the *Containers Output form*. Double-clicking on one of the listed records loads the *Containers Data Entry form*. This form contains the information regarding individual containers.

Item Number	Product Name	Location Name	Amount
Can	MERCURIC BROMIDE	Building 5	0
	ACETYLENE	Building 5	0
	UNOCAL MULTIPURPOSE ATF DEXRON (Building 1	0
	ADHESIVE 404, QUICK SET	Building 1	0
	GASOLINE, AUTOMOTIVE, UNLEADED (Building 1	0
	SODA LIME	Building 1	0
	ADHESIVE 404, QUICK SET	Building 2	0
	ISOBUTANE	Building 1	0
	ISOPROPYL ALCOHOL	Building 1	0
	WD-40, SPRAY	Unit 2	0
	SODA LIME	Unit 2	0
	PYROGALLIC ACID	Unit 2	0
	PURPLE K	Unit 2	0
	MERCURIC BROMIDE	Unit 2	0
	ISOBUTANE	Unit 1	0
	JETWELD LH-70	Unit 1	0
	ISOBUTANE	Equipment 1	0
	FERRIC NITRATE	Equipment 1	0

- Click on the **NEW** button to create a new container record.
- Click on the **DELETE** button to remove the highlighted container record.
- Double-click the highlighted container record to edit that record's information.
- Click on the **ALL** button to view the entire list of container records.
- Click on the **SEARCH** button to search for container records matching a specific criteria.
- Click on the **SORT** button to sort container records by different criteria.
- Click on the **CLOSE** button to close the *Containers Output form*.

Containers Data Entry Form

The *Containers Data Entry form* allows for the entry of container information relating to a specific product being stored at a specific location.

The screenshot shows a window titled "Container: 22 of 143". The form contains the following fields and controls:

- MSDS ID: 0008
- Product Name: GASOLINE, AUTOMOTIVE, UNLEADED (RFG) with a "Select" button.
- Location Name: Warehouse C > Building 5 with a "Select" button.
- Item Number: (empty) and Responsible Person: (empty) with a "Select" button.
- Auto Generated:
- Start Date: 00/00/00, Expires Date: 00/00/00, Days on Site: 365, Last Updated: 00/00/00
- Number Containers: 1, Container Size: 5000, Container Unit: US Gallons (dropdown)
- SARA Codes section:
 - Container Type: C Tank inside building (dropdown)
 - Container Pressure: (empty dropdown)
 - Container Temperature: (empty dropdown)
- Container Properties section:

Current Amount	Max Amount	Average Amount
31,125	31,125	31,125

Buttons at the bottom: Duplicate, Cancel, Save.

Container information that can be entered into the *Container Data Entry form* includes:

- The **Item Number** field stores an optional internal company code assigned to a specific container for the purpose of tracking Inventory.
- The **Responsible Person** field lists the name of the person responsible for the current container.
- The **Auto Generated** checkbox indicates whether the container record was automatically created by MSDSpro or created manually by a user.
- The **Start Date** field displays the date the Container was first stored at this Location.
- The **Expires Date** field displays the date the Container stopped or will stop being stored at this Location.

Containers cont'd

- **The Days on Site field lists the total number of days the listed container has been stored at the listed Location.**
- **The Last Updated field shows the date the information in a container record was last updated.**
- **The Number of Containers field lists the quantity of containers that are used to store the Product as Inventory at the listed Location.**

For example, if a Product is stored at a Location in ten 55-gallon drums, the Number of Containers field should contain the number ten.

- **The Container Size field lists the size of each container .**

Using the previous example, the Container Size field should contain the number fifty-five.

- **The Container Unit field lists the units of weight or volume that the Inventory quantity is measured in.**

Using the previous example, the Container Unit field should contain the word gallons.

- **The Container Type field lists the type of container used to store the Product at the listed location.**
- **The Container Pressure field details whether the Product will be compressed, expanded or stored at the ambient pressure.**
- **The Container Temperature field details whether the product will be heated, chilled or stored at the ambient temperature.**
- **The Current Amount field lists the current Product quantity in pounds for this container record.**
- **The Maximum Amount field lists the maximum Product quantity in pounds for this container record.**
- **The Average Amount field lists the average Product quantity in pounds for this container record.**

Chemical Authorization Requests

The Chemical Authorization Requests selection tracks and stores information about which employee has requested and received or been denied authorization for the use of a specific chemical. Chemical Authorization Requests are also referred to as C.A.R.s.



Selecting Chemical Authorization Requests from the Admin Control Panel prompts the user to list all C.A.R. records, search for a specific C.A.R. record or add a new C.A.R. record. Selecting Search for Records loads the Query Editor, covered on pp. 3-8 through 3-12. Selecting Add Records loads the *Chemical Authorization Entry Form*, covered on pp. 4-77 through 4-83. Selecting List All records loads the *Chemical Authorization Output form*. The *Chemical Authorization Output form* allows for seven actions.

CAR Number	MSDS ID	Product Name	Status	Type	Department
1			Approved	Standard Product	Engineering
2	0003	ACETYLENE	Approved	Standard Product	East Coast
6		asd	Not Submitted	Standard Product	
5	0003	ACETYLENE	Submitted	Standard Product	Development
7			Submitted	Standard Product	Sales
8	0011	ISOPROPYL ALCOHOL	Approved	Standard Product	Engineering
11	0016	PYROGALLIC ACID	Approved	Standard Product	
12				Standard Product	

Chemical Authorization Requests (cont'd)

- Click on the **NEW** button to create a new request.
- Click on the **DELETE** button to remove the highlighted request.
- Double click on a specific record to modify it's information.
- Click on the **ALL** button to view the entire list of requests.
- Click on the **SEARCH** button to search for requests matching a specific criteria.
- Click on the **SORT** button to sort the requests alphabetically.
- Click on the **CLOSE** button to close the *Chemical Authorization Output form*.

The screenshot displays a software window titled "Chemical Authorization: Adding new record to 10 existing". The window contains a form with five tabs: "Specific Information", "Requestor Information", "Location Used", "Usage Information", and "Approvers". The "Specific Information" tab is active and contains the following fields and controls:

- CAR Number:** Text box containing "15".
- Status:** Dropdown menu.
- Department:** Text box with a "Select" button.
- MSDS ID:** Text box.
- Product Name:** Text box.
- Not Linked to Product:** Text label.
- Select Product:** Button.
- Create Product Record:** Button.
- Manufacturer:** Text box.
- Supplier:** Text box.
- URL:** Text box.
- Revision Date:** Text box containing "00/00/00".
- Submitted Date:** Text box containing "00/00/00".
- Approved Date:** Text box containing "00/00/00".
- Initial Comments:** Large text area.
- Final Comments:** Large text area.

At the bottom of the form, there are four navigation buttons: "View Product", "Force Resubmit", "Cancel", and "Save".

The *Chemical Authorization Entry Form* consists of five tabs; ***Specific Information, Requestor Information, Location Used, Usage Information, & Approvers***. These five tabs contain all the information pertinent to a single request made for authorization to use a chemical.

Chemical Authorization Requests (cont'd)

Specific Information Tab: The **Specific Information tab** contains information about the chemical for which authorization is being requested. The following fields are available for population under the **Specific Information tab**.

The screenshot shows a software window titled "Chemical Authorization: Adding new record to 10 existing". It features a tabbed interface with the following tabs: "Specific Information", "Requestor Information", "Location Used", "Usage Information", and "Approvers". The "Specific Information" tab is selected and contains the following fields and controls:

- CAR Number:** A text box containing the value "15".
- Status:** A dropdown menu.
- Department:** A text box with a "Select" button to its right.
- MSDS ID:** A text box.
- Product Name:** A text box with a "Select Product" button to its right.
- Manufacturer:** A text box.
- Supplier:** A text box.
- URL:** A text box.
- Revision Date:** A text box containing "00/00/00".
- Submitted Date:** A text box containing "00/00/00".
- Approved Date:** A text box containing "00/00/00".
- Initial Comments:** A large text area.
- Final Comments:** A large text area.

At the bottom of the window, there are several buttons: a set of four small navigation icons, "View Product", "Force Resubmit", "Cancel", and "Save".

The C.A.R. record will only be editable if the current user has logged in as a member of the Chemical Manager Group. Users who have not logged in as a member of the Chemical Manager Group will only be able to view the C.A.R.. Members of the Approvers group will be able to approve C.A.R.s.

- **CAR Number:** A unique number designed to identify a specific Chemical Authorization Request (CAR) and keep it separate from other CARs.
- **Status:** Displays at what step in the chemical authorization process the request currently resides.
- **Department:** Lists the name of the Department for which the chemical is to be authorized.
- **MSDS ID:** The MSDS ID field is a unique number assigned to identify and differentiate one Product record from other product records.
- **Product Name:** The name of the chemical for which Authorization is being requested.

Chemical Authorization Requests (cont'd)

- **Select Product button:** Clicking on the **SELECT PRODUCT** button produces a list of all product records.

Click on the desired product to link the request to a specific product.

- **Create Product Record:** Clicking on the **CREATE PRODUCT RECORD** button will create a new product record.

Use this button if a product record does not currently exist for the chemical being authorized.

- **Manufacturer:** The name of the company that manufactures the chemical.
- **Supplier:** The name of the company from which the chemical was purchased.
- **URL of MSDS:** The Internet Address of the MSDS for the requested chemical.
- **Revision Date:** The date the chemicals MSDS was most recently revised.
- **Submitted Date:** The date the chemical authorization was submitted.
- **Approved date:** The date chemical authorization was approved.
- **Initial/Final Comments:** Comments made during the submission of the authorization or upon approval of the authorization.

Initial comments are emailed to the selected approvers. Final comments are emailed to the requestor.

Chemical Authorization Requests (cont'd)

Requestor Information Tab: The **Requestor Information tab** provides additional information about the employee requesting authorization to use a chemical. The following fields are available for population under the **Requestor Information tab**.

The screenshot shows a software window titled "Chemical Authorization: 7 of 8". It has five tabs: "Specific Information", "Requestor Information", "Location Used", "Usage Information", and "Approvers". The "Requestor Information" tab is active. It contains the following fields and controls:

- CAR Number:** Text field containing "11".
- Status:** Dropdown menu showing "Approved".
- Department:** Text field with a "Select" button next to it.
- Requestor Information:** A sub-section with five fields: "Employee Number", "Employee Name", "Phone", "Department", and "Technical Contact".
- Contractor Name:** Text field.
- Rush:** A checkbox that is currently unchecked.
- Rush Reason:** A large text area for entering details.
- Navigation:** A set of four arrow buttons (back, forward, search, refresh) at the bottom left.
- Buttons:** "View Product", "Cancel", and "Save" buttons at the bottom right.

- **Employee Number:** A unique number assigned to an employee to help differentiate, identify and distinguish one employee from other employees.
- **Employee Name:** The name of the employee requesting the chemical authorization.
- **Phone:** The phone number of the employee requesting the chemical authorization.
- **Department:** The department in which the employee requesting the chemical authorization works.
- **Technical Contact:** Contact information for someone who can answer technical questions on the chemical or request.
- **Contractor name:** The name of the contractor for whom the employee works if applicable.
- **Check the Rush checkbox** if this C.A.R. is especially urgent.
- **Enter the reason why this request is especially urgent** in the Rush Reason field.

Chemical Authorization Requests (cont'd)

Location Used Tab: Fields under the **Location Used tab** provide additional information about the location at which the chemical will be used. The following fields are available for population under the **Location Used tab**.

The screenshot shows a software window titled "Chemical Authorization: 7 of 8". It features five tabs: "Specific Information", "Requestor Information", "Location Used", "Usage Information", and "Approvers". The "Location Used" tab is selected and contains the following fields:

- CAR Number:** A text box containing the value "11".
- Status:** A dropdown menu currently set to "Approved".
- Department:** A text box with a "Select" button to its right.
- Building:** A dropdown menu.

At the bottom of the window, there are navigation buttons (back, forward, etc.) and three main action buttons: "View Product", "Cancel", and "Save".

- **Building:** Lists the building in which the chemical will be used.
- **CAR definable fields** will also show up on this tab.

Chemical Authorization Requests (cont'd)

Approvers Tab: The **Approvers tab** lists persons who must authorize the use of the chemical. The order in which each employee must approve the chemical is listed along with the status of that employee's review of the authorization and their comments on it. Clicking on the **ADD** button allows current employee records to be imported into the approvers list.

Order	Approver	Status	Comments
0	Cohen	Approved	

- **Status:** The status field shows at what step in the approval process the chemical currently resides.
- **Set Default Approvers List Check Box:** Selecting the Set Default Approvers List check box will set the list of approvers currently displayed as a default list.

The default approvers list will be automatically loaded into future new C.A.R.s.

Chemical Authorization Requests (cont'd)

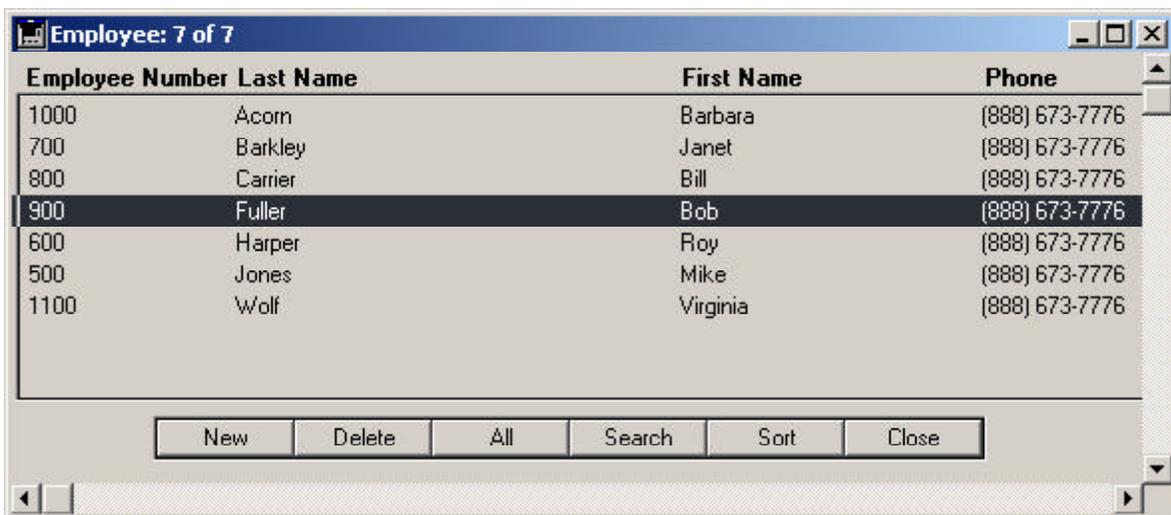
To add an employee as an approver (the employee must already have an MSDSpro employee record):

1. Click on the **ADD** button at the bottom of the *Approvers tab*.

Clicking on the ADD button loads the *Select Approver Entry form*.

2. Click on the **SELECT APPROVER** button to choose from all employee records.

Clicking on the **SELECT APPROVER** button loads the *Select Employee Output form*. To review and approve a C.A.R. an employee record must be a part of either the Chemical Manager or Approver group.



Employee Number	Last Name	First Name	Phone
1000	Acorn	Barbara	(888) 673-7776
700	Barkley	Janet	(888) 673-7776
800	Carrier	Bill	(888) 673-7776
900	Fuller	Bob	(888) 673-7776
600	Harper	Roy	(888) 673-7776
500	Jones	Mike	(888) 673-7776
1100	Wolf	Virginia	(888) 673-7776

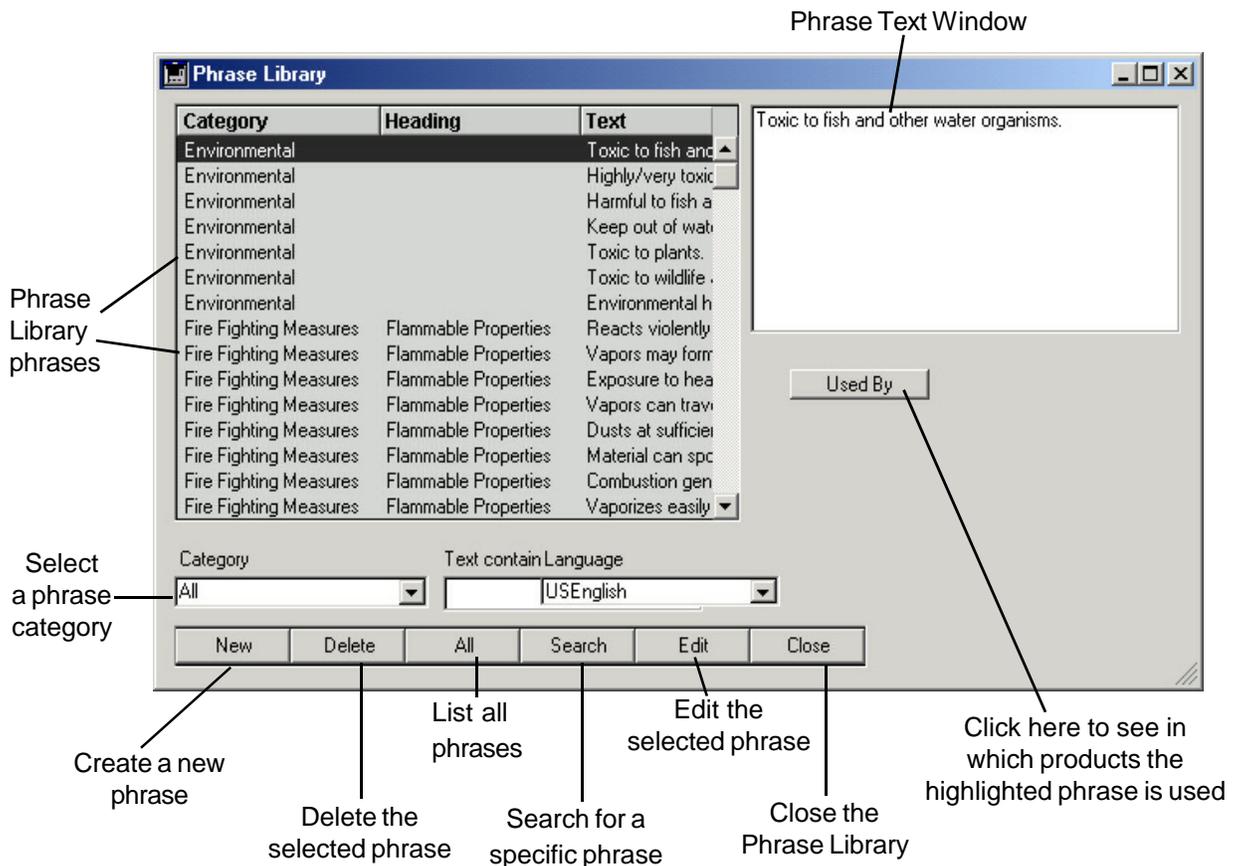
Buttons: New, Delete, All, Search, Sort, Close

3. Highlight the Employee record to be added as an approver.
 - Click on the **NEW** button to create a new Employee record.
 - Click on the **SEARCH** button to search for a specific Employee record.
 - Click on the **VIEW** button to view the information contained in the highlighted Employee record.
 - Click on the **CANCEL** button to close the *Select Employee Output form*.
4. Click on the **OK** button to add the highlighted Employee record to the *Select Approver Entry form*.
5. Select the appropriate Status from the Status pull down menu.
6. Enter any additional comments in the Comments field and click on the **SAVE** button.

Phrase Library

The Phrase Library is used to store commonly used phrases that describe characteristics of one or more products. Using the Phrase Library is the fastest and easiest way to add common information to a product record or ANSI Document. A phrase library record may be associated with any product record. When a phrase library record is modified, all product records or ANSI Documents using that phrase will also be updated.

Phrase Library Output Form



- Click on an individual phrase to view the phrase text in the Phrase Text Window.
- Open the Phrase Category pull down menu to select a specific phrase library category. This will cause only phrases in that category to be listed.
- Click on the NEW button to begin adding a new phrase to the phrase library. See pp. 4-57) on adding a new phrase to the phrase library.
- Click on the DELETE button to delete the highlighted phrase from the phrase library.
- Use the Text Contains field to search all phrases for a specific string of text.

Phrase Library (cont'd)

- Upon opening the *Phrase Library Output form*, only active Phrase Library records are shown.

To view all records (including inactive Phrase Library records), click on the ALL button.

- Click on the EDIT button to modify an existing phrase.
- Click on the SEARCH button to search the Phrase Library. See pp. 4-58 on searching the phrase library.
- The USED BY button reveals which product records contain the selected phrase.

Adding a new phrase to the Phrase Library:

New phrases can be added to the Phrase Library by clicking on the **NEW** button in the lower left hand corner of the *Phrase Library Output form*. Clicking on the **NEW** button brings up the *Phrase Library: Adding new record Data Entry form*.

Click here to create a new category

1. Select the category that describes the phrase most accurately. If desired, create a new category by clicking on the NEW button, typing in the name of the new category and clicking the OK button.

Phrase Library (Cont'd)

2. Fill in the Heading and Title fields so that the new phrase is accurately summarized.

The Heading field acts as a subcategory to the Category field and provides additional information as to the subject of the phrase. The Title field gives a brief description as to what the phrase will describe.

3. Enter today's date in the Date Started field. If the phrase is to become inactive on a set date, enter that date into the Date Ended field.
4. Select the language in which the new phrase will be written.
5. Click on the *Phrase Text* tab. Enter the new phrase into the Phrase Text field.
6. Click on the SAVE button to finish adding the new phrase to the Phrase Library.

Adding a new foreign language phrase to the Phrase Library:

MSDSpro has the ability to store phrases in French, German, and Spanish. These phrases can then be added to any new or existing product record or used to author MSDSs in their respective languages. To create a new phrase in a foreign language:

1. Click on the NEW button on the *Phrase Library Output form* to add a new foreign language phrase OR select the phrase and click on the EDIT button to add a foreign language translation.

Clicking on the NEW or EDIT button brings up the *Phrase Library Data Entry form*.

Phrase Library (cont'd)

2. Click on the tab of the language in which the new phrase will be created.
3. Click on the O.K. button to translate the phrase into the language desired.
4. Enter the new translation into the Heading, Title and Phrase Text fields.
5. Select the category to which the new foreign language phrase belongs or create a new category by clicking on the NEW button.
6. If the dates in which the phrase will be active are known, enter them in the Date Started and Date Ended fields.
7. Click on the SAVE button in the lower right hand corner to save the new foreign language phrase.

Editing an existing Phrase

Existing phrases can be modified by clicking on the **EDIT** button along the bottom of the *Phrase Library Output form*. The process for editing an existing phrase is the same as creating a new phrase. Rather than entering new information however, modify the existing information as necessary.

Searching the Phrase Library

To locate a specific phrase within the Phrase Library click on the **SEARCH** button along the bottom of the *Phrase Library Output form*. To search all phrases for a specific string of text type the words into the Text Contains field and hit the Enter key to start the search.

Clicking on the **SEARCH** button along the bottom of the *Phrase Library Output form* loads the Query Editor. Use of the Query Editor is covered on pp 3-8 through 3-12.

Adding Existing Phrases to the Product Record

To add an existing phrase to the Product Record:

1. From the *Phrase Library Output form* select the phrase to be added. The Product Record must be at least partially visible behind the Phrase Library.
2. Holding down the left mouse button, move the mouse cursor over the Product Record.
3. Release the left mouse key.

The phrase will now appear in the Product Record. This procedure is known as drag and drop.

Phrase Library (cont'd)

Adding Existing Phrases to an ANSI 16 Section Document

To add an existing phrase to an ANSI 16 Section Document:

1. **Open the desired Product record.**
2. **Make sure ANSI Document is selected as the Document Type.**
3. **Click on the *Document* tab.**
4. **Select the tab under which the phrase(s) will be added. Phrases can be added to sections 3-16.**
5. **Click on the PHRASE LIBRARY button in the lower left hand corner of the ANSI 16 Section Document.**
6. **The ANSI 16 Section Document must be at least partially visible behind the Phrase Library.**
7. **Holding down the left mouse button, move the mouse cursor over the ANSI 16 Section Document.**
8. **Release the left mouse key.**

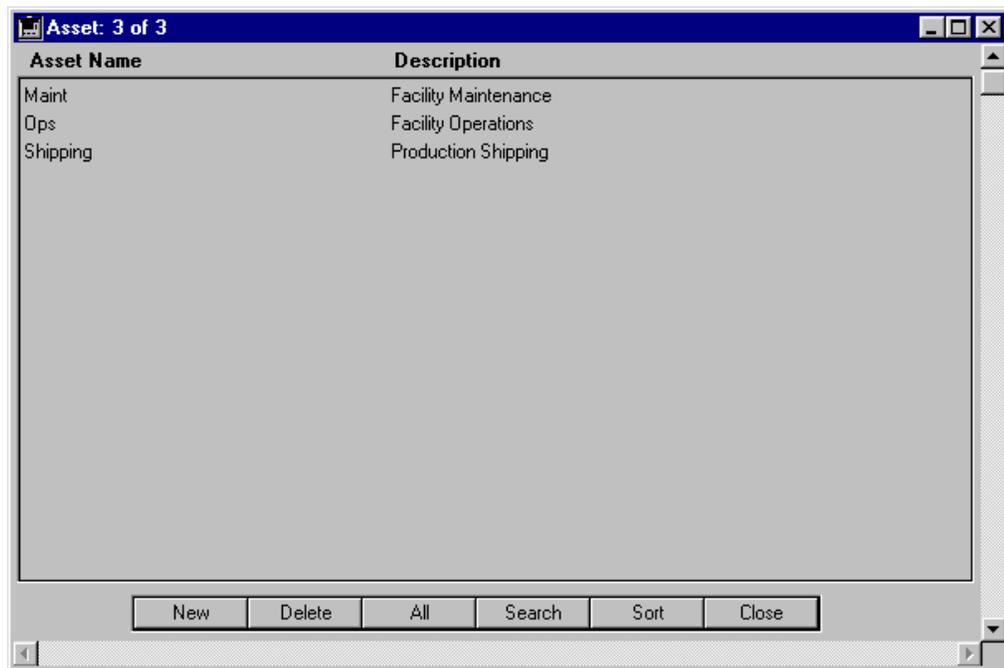
The phrase will now appear in the ANSI 16 Section Document. This procedure is known as drag and drop.

Asset

The Asset table is used to categorize any Location records. By modifying a record in the Asset table, changes will immediately take effect in the Location lookup values.

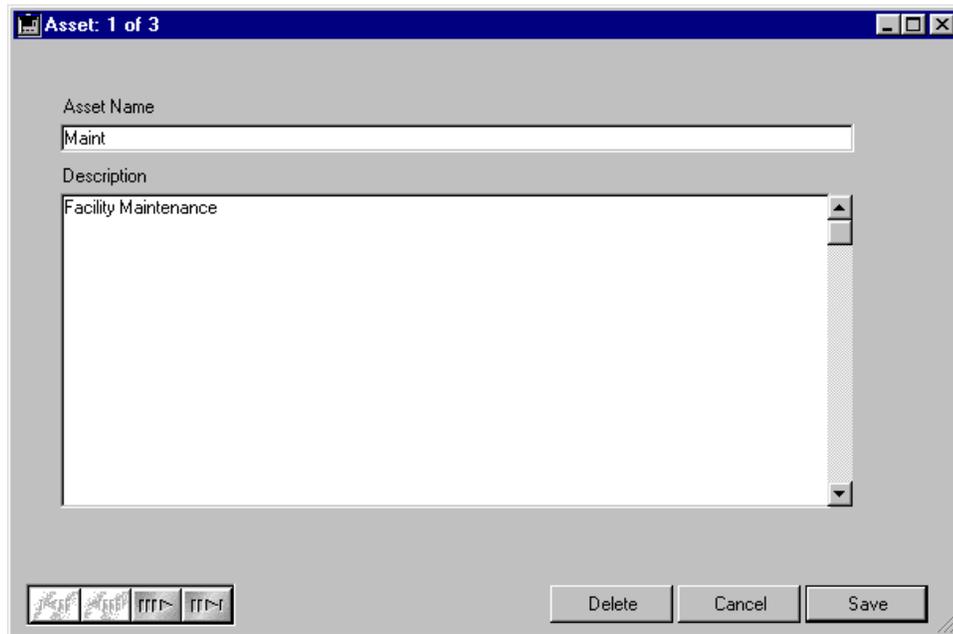
Asset records are helpful to categorize Location records (and subsequently, all Sublocations and Inventory records that are associated with them), but Asset records are not mandatory to be assigned to a Location record.

Asset Output Form



Asset Data Entry Form

The *Asset Data Entry form* allows the entry of the Asset Name and Description fields.



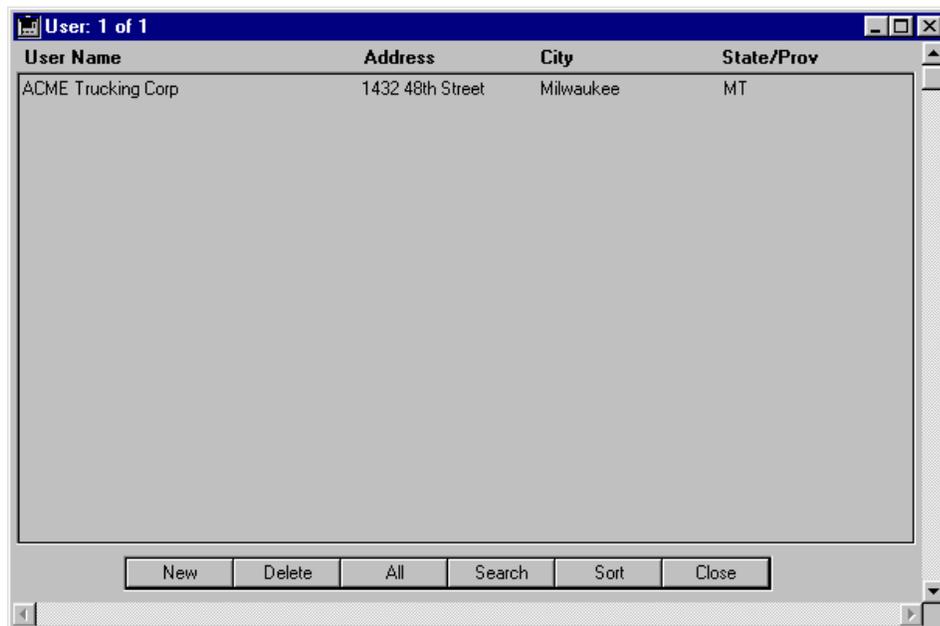
The screenshot shows a window titled "Asset: 1 of 3". It contains two input fields: "Asset Name" with the text "Maint" and "Description" with the text "Facility Maintenance". At the bottom, there are navigation icons and three buttons: "Delete", "Cancel", and "Save".

User

The User table is used to link Users (Individuals or Organizations) to a specific MSDS Product.

User records allow for streamlined updates for users of a specific MSDS Product.

User Output Form



The screenshot shows a window titled "User: 1 of 1" containing a table with the following data:

User Name	Address	City	State/Prov
ACME Trucking Corp	1432 48th Street	Milwaukee	MT

Below the table, there is a control bar with buttons for "New", "Delete", "All", "Search", "Sort", and "Close".

User Data Entry Form - User Information Tab

The **User Information tab** displays information that is entered only once for a specific User record.

User Data Entry Form - Linked Products Tab

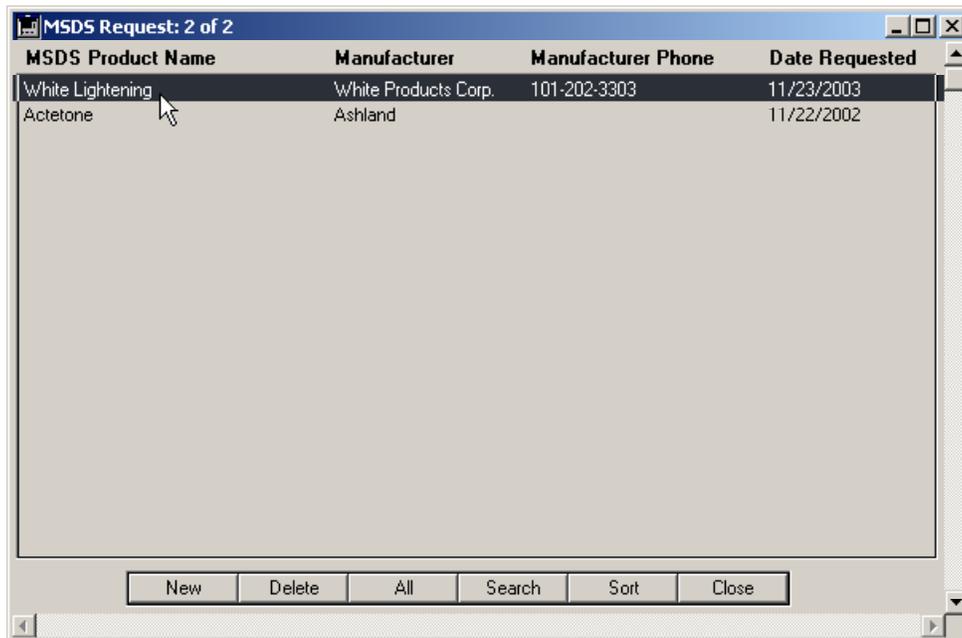
The **Linked Products tab** allows viewing, addition, or removal of specific MSDS Products for a User:

Current Version	Current Revision Date	Product Name	Manufacturer Name
1	08/14/1993	Chevron Machine Oil R&O ISO 150	Chevron USA Products Company
1	06/07/1996	Phosgene	DOC Gases
1	12/10/1996	00321 AMATION GASOLINE 100 LL	Texaco Refining & Marketing, Inc.

MSDS Request

MSDS Requests are automatically provided from the web interfaces built into MSDSpro Enterprise and MSDSpro PlusWeb, allowing any user of the system to request an MSDS, by and providing basic information about the required document.

MSDS Request Output Form



MSDS Product Name	Manufacturer	Manufacturer Phone	Date Requested
White Lightening	White Products Corp.	101-202-3303	11/23/2003
Acetone	Ashland		11/22/2002

Upon opening the MSDS Requests *Output form* (as shown above), only unfulfilled MSDS Requests are shown. To view all records (including fulfilled MSDS Requests), click **ALL**.

Double-click an entry to view the MSDS Request detail information in the MSDS Request *Data Entry form* and make any modifications to the record.

MSDS Request Data Entry Form - MSDS Request Tab

The *MSDS Request tab* displays information about the MSDS request.

MSDS Request Data Entry Form - Requestor Information Tab

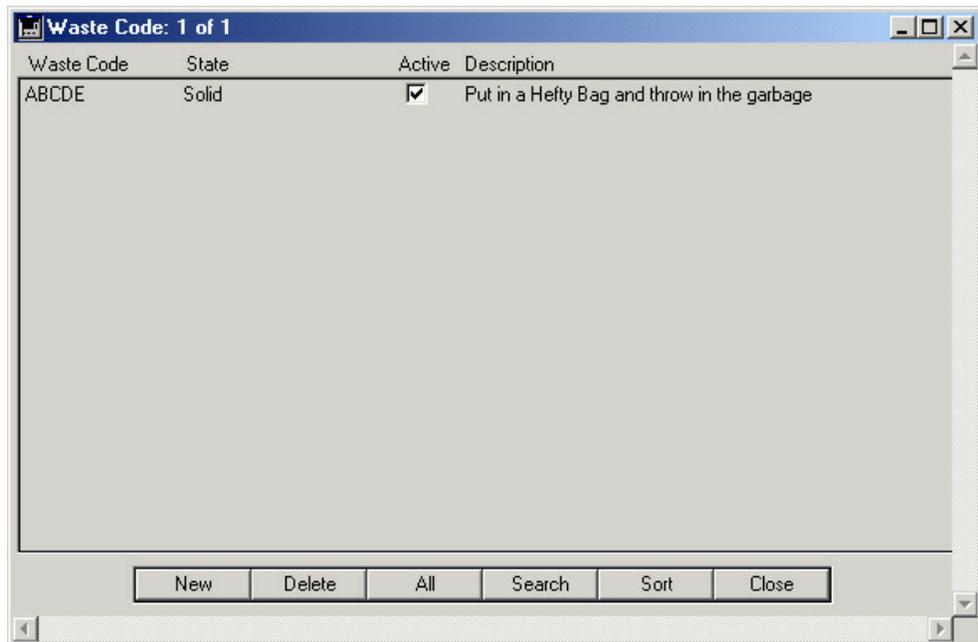
The *Requestor Information tab* displays information about the MSDS requestor.

Waste Codes

Waste Codes are unique identifiers designed to identify a method by which a product should be disposed.

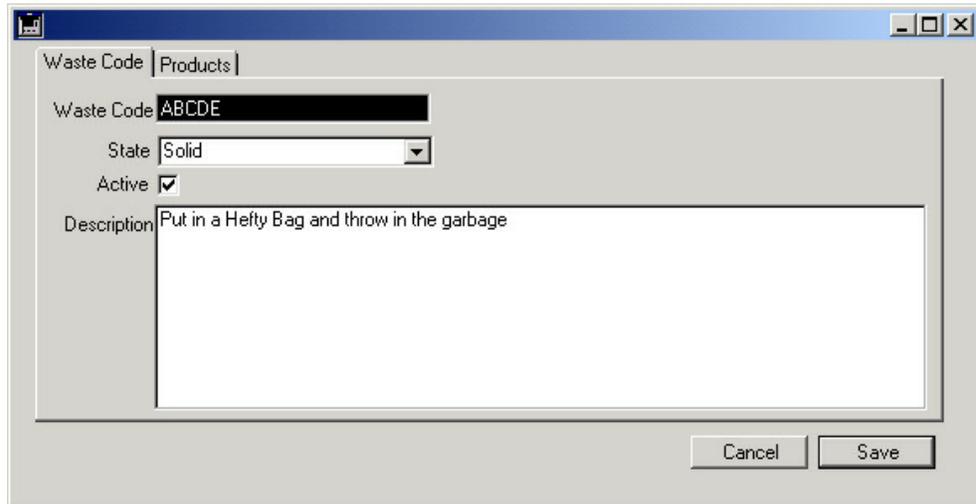
Waste Code Output form

Selecting Waste Codes from the Admin Control Panel loads the *Waste Code Output form*. The *Waste Code Output form* lists all active Waste Code records.



Waste Code tab

The Waste Code tab describes the method of disposal to which this Waste Code relates.



The screenshot shows a software window with two tabs: 'Waste Code' and 'Products'. The 'Waste Code' tab is selected. The form contains the following fields:

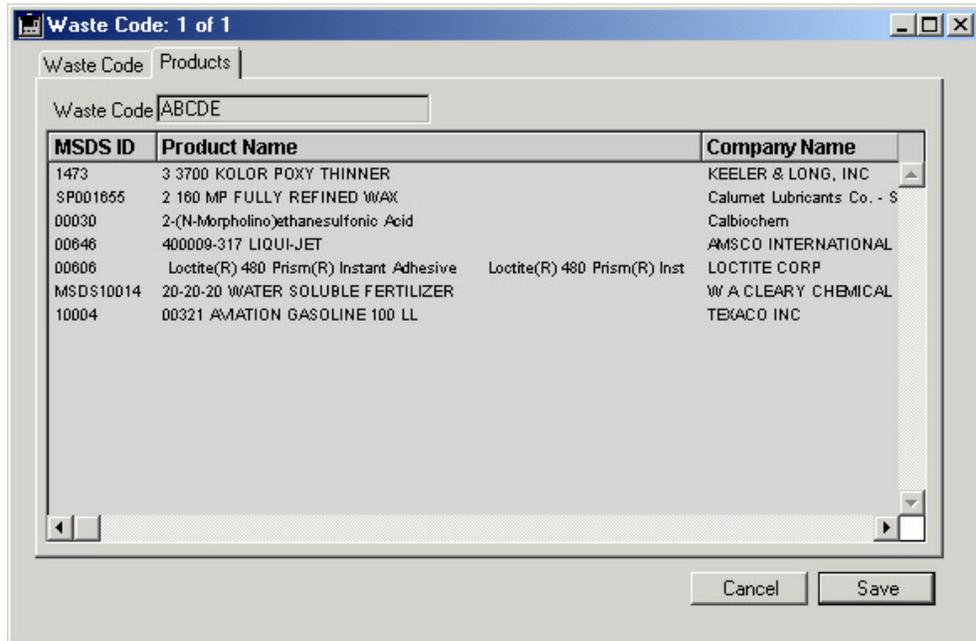
- Waste Code:** A text field containing the alphanumeric string 'ABCDE'.
- State:** A dropdown menu currently showing 'Solid'.
- Active:** A checked checkbox.
- Description:** A text area containing the text 'Put in a Hefly Bag and throw in the garbage'.

At the bottom right of the window are two buttons: 'Cancel' and 'Save'.

- **Waste Code:** The Waste Code field holds the alphanumeric string that uniquely identifies this Waste Code.
- **State:** The State field indicates whether the waste is a solid or a liquid.
- **Active:** The Active checkbox indicates whether or not this Waste Code is currently used. If the Active checkbox is not checked the Waste Code will not show up on the *Waste Code Output* form.
- **Description:** The Description field indicates the method of disposal to which this Waste Code relates.

Waste Codes Products tab

The Products tab displays which products are currently linked to this Waste Code.



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Human Resources

The **Human Resources tab** allows access to the following tables/data entry areas within MSDSpro:

- Departments
- Employees
- Groups

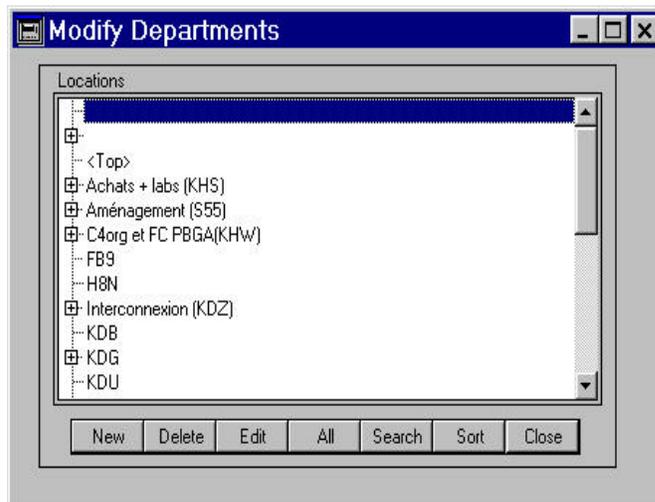
Admin Control Panel

Human Resources are accessed from the Admin Control Panel.



Departments

The Departments selection, under the **Human Resources tab**, tracks and organizes information relating to company departments. Selecting Departments from the Admin Control Panel prompts the user to list all department records, search for a specific department record or add a new department record. Selecting Search for Records loads the Query Editor, covered on pp. 3-8 through 3-12. Selecting Add Records loads the *Department Data Entry Form*, covered on pp. 5-4. Selecting List All records loads the *Department Output form*. The *Department Output form* allows for seven actions.

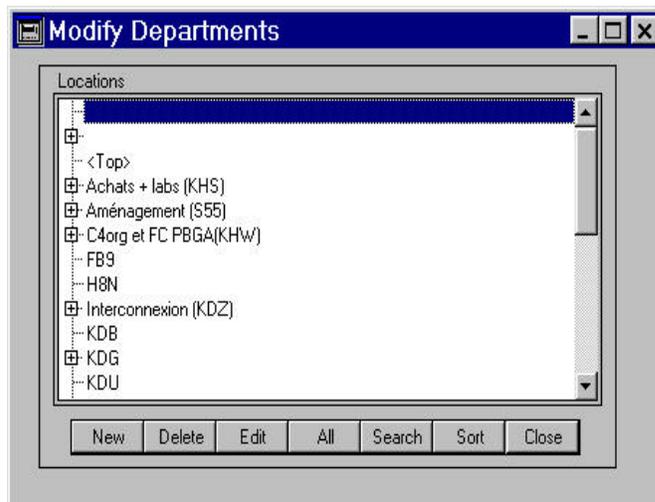


- Click on the **NEW** button to create a new department.
- Click on the **DELETE** button to remove the highlighted department.
- Click on the **EDIT** button to modify the information relating to the highlighted department.
- Click on the **ALL** button to view the entire list of departments.
- Click on the **SEARCH** button to search for departments matching a specific criteria.
- Click on the **SORT** button to sort the departments alphabetically.
- Click on the **CLOSE** button to close the *Modify Departments Output form*.

Moving Departments

The Modify Departments Output form allows the user to move departments within the hierarchy. Users can:

- **Make one department a subsidiary of another department.**
- **Change a subdepartment to a parent department.**
- **Move a subdepartment from one parent department to another.**



To move a department from one Parent department to another:

1. **Highlight the department to be moved.**
2. **Click the left mouse button and drag the department on top of the desired Parent department.**

To make a subdepartment a parent department, move the subdepartment on top of the word <Top>.

Adding or Editing Departments

Clicking on the **NEW** or **EDIT** button on the *Modify Departments Output form* loads the *Department Data Entry form*.

The screenshot shows a window titled "Edit Department". It contains the following fields and controls:

- Department Number: 654
- Department Name: Technical Support
- Parent Department: Engineering
- Primary Contact section with two radio buttons:
 - Manager: Employee ID (123), Name (Carpenter, Clint), Email (ccarpenter@msdspro.com)
 - Contact: Employee ID (130), Name (Cohen, Matt), Email (empty)
- Buttons: Select (next to Manager Employee ID), Select (next to Contact Employee ID), Cancel, Save

To Add or Edit a Department:

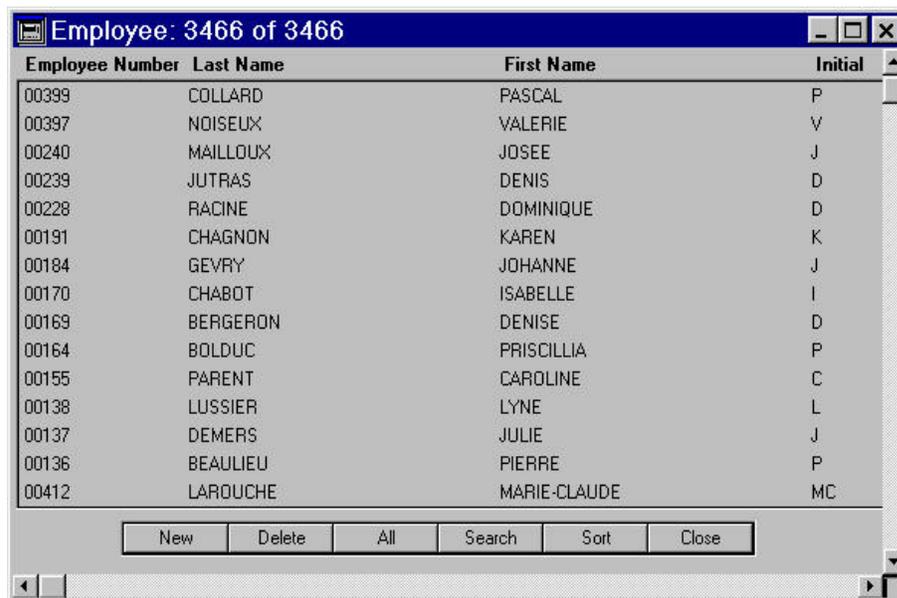
1. **Enter or Edit the number representing the Department in the Department Number field.**
2. **Enter or Edit the name of the Department in the Department Name field.**
3. **Select whether the primary contact will be the manager or the employee.**
4. **Click on the SELECT button to populate the Manager and Contact sections.**

If the Manager is set as the primary contact, the contact section is not available for population.

5. **Click on the SAVE button to save the newly created information.**

Employees

The Employees selection, under the **Human Resources tab**, tracks and organizes information relating to employees. Selecting Employees from the Admin Control Panel prompts the user to list all employee records, search for a specific employee record or add a new employee record. Selecting Search for Records loads the Query Editor, covered on pp. 3-8 through 3-12. Selecting Add Records loads the *Employee Data Entry Form*, covered on pp. 5-6. Selecting List All records loads the *Employee Output form*. The *Employee Output form* allows for seven actions.



Employee Number	Last Name	First Name	Initial
00399	COLLARD	PASCAL	P
00397	NOISEUX	VALERIE	V
00240	MAILLOUX	JOSEE	J
00239	JUTRAS	DENIS	D
00228	RACINE	DOMINIQUE	D
00191	CHAGNON	KAREN	K
00184	GEVRY	JOHANNE	J
00170	CHABOT	ISABELLE	I
00169	BERGERON	DENISE	D
00164	BOLDUC	PRISCILLIA	P
00155	PARENT	CAROLINE	C
00138	LUSSIER	LYNE	L
00137	DEMERS	JULIE	J
00136	BEAULIEU	PIERRE	P
00412	LAROUCHE	MARIE-CLAUDE	MC

- Click on the **NEW** button to create a new employee record.
- Click on the **DELETE** button to remove the highlighted employee record.
- Double-click the highlighted employee record to edit that record's information.
- Click on the **ALL** button to view the entire list of employees.
- Click on the **SEARCH** button to search for employees matching a specific criteria.
- Click on the **SORT** button to sort the employees alphabetically.
- Click on the **CLOSE** button to close the *Employees Output form*.

Adding or Editing Employee records

Employee records can be added or modified in three different ways.

1. By clicking on the **NEW** button on the *Employee Output form*.
2. By double clicking on an existing employee record in the *Employee Output form*.
3. By selecting add records after selecting Employees from the Admin Control Panel.

The screenshot shows a window titled "Employee: 9 of 9". It contains the following fields and controls:

- Employee Number: 0045855
- First Name: Janet
- Last Name: Barkley
- Initial: L
- Email: jbarkley@msdspro.com
- Phone Number: 123 456-6789
- Department: Technical Support (with Select and Clear buttons)
- MSDSpro Account: (with Select and Clear buttons)
- Groups: R & D (highlighted in a list box)
- Buttons: Add, Delete, Cancel, Save

To Add or Edit an Employee record:

1. Enter the employee's name, email address & phone number in the appropriate fields.
2. Click on the **SELECT** button to choose the Department to which the employee will belong.
3. Click on the **SELECT** button to choose the MSDSpro Account the employee will use to log in to MSDSpro.

Clicking on the **CLEAR** button clears the contents of the Department or MSDSpro Account fields.

4. Click on the **ADD** button to add the employee to a group.

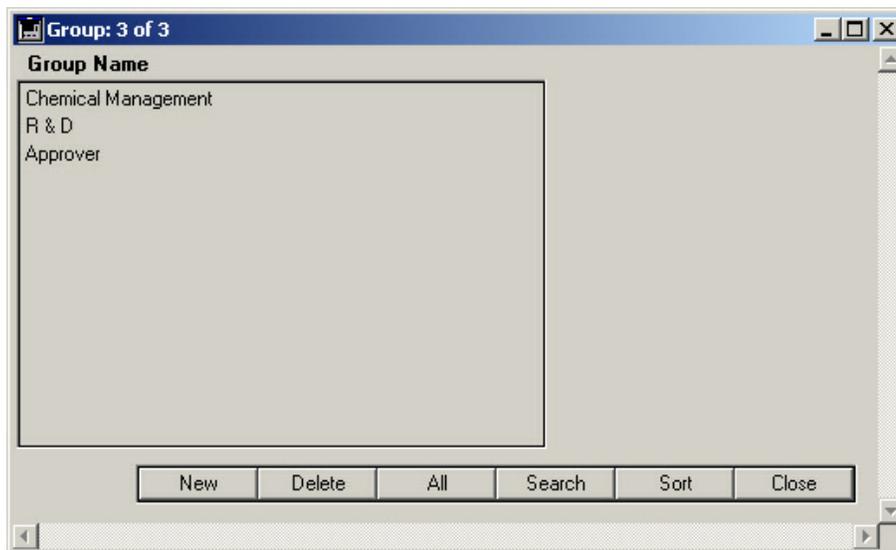
Clicking on the **ADD** button will load the *Select Group Output form*. Highlight the desired group and click on the **OK** button.

5. Click on the **DELETE** button to remove the employee from the highlighted group.

Once the information desired has been added, click on the **SAVE** button.

Groups

The Groups selection, under the **Human Resources tab**, organizes and stores information detailing employee group membership. A group as defined within MSDSpro is a discrete set of employees whom share a common responsibility, privilege or other characteristic relating to the company. Selecting Groups from the Admin Control Panel prompts the user to list all group records, search for a specific group record or add a new group record. Selecting Search for Records loads the Query Editor, covered on pp. 3-8 through 3-12. Selecting Add Records loads the Group Data Entry Form, covered on pp. 5-8. Selecting List All Records loads the *Group Output form*. The *Group Output form* allows for seven actions.



- Click on the **NEW** button to create a new group record.
- Click on the **DELETE** button to remove the highlighted group record.
- Double-click the highlighted group record to edit that record's information.
- Click on the **ALL** button to view the entire list of groups.
- Click on the **SEARCH** button to search for groups matching a specific criteria.
- Click on the **SORT** button to sort groups by different criteria.
- Click on the **CLOSE** button to close the *Groups Output form*.

Adding or Editing Group records

Group records can be added or modified in three different ways.

1. By clicking on the **NEW** button on the *Group Output form*.
2. By double clicking on an existing employee record in the *Group Output form*.
3. By selecting add records after selecting Groups from the Admin Control Panel.

The addition or modification of Group records is performed on the *Group Data Entry form*.



The image shows a dialog box titled "Group: Adding new record to 3 existing". It contains a "Group Name" text input field, a "Locked" checkbox, a "Description" text area, and "Cancel" and "Save" buttons at the bottom.

To add a new group:

1. Enter into the **Group Name** field the name of the Group to be created.
2. Enter into the **Description** field a description of the new group including the roles, responsibilities, privileges and authorities group members will have.
3. Some Groups are used by the system and cannot be changed. These Groups are locked and the **Locked** checkbox will be checked.
4. Click on the **SAVE** button to save the new group.

Special Functions

Special Functions consist of:

- **Import/Export**
- **Archives**
- **Password Editor**
- **Preferences**
- **Dictionary**
- **Wizard Setup**
- **Web Server Configuration**
- **Create Product Package**
- **Import Product Package**
- **Edit Logs**
- **Edit User Lists**

Admin Control Panel

Special Functions are accessed from the *Admin Control Panel*.



Import/Export

To Import data into or Export data out of any table in the database:

1. **Select *Import/Export* from the *Administration Control Panel*.**

A scrolling list of tables is presented in alphabetical order.

2. **Select the table to import data into, or to export data out of.**
3. **Click OK.**

All records will be listed for the table selected in the associated *Output form*.



4. **Select *Import Data* or *Export Data* from the *Selection menu* (see *Importing Data and Exporting Data* in *Database Conventions and Operations*).**

Perform any necessary searches or sorts prior to starting an export.

Archives

The database archive is available to browse Products, MSDS Document, and associated information that has been archived at some point in the past. Any Product may be archived. The MSDS document, Synonyms, Inventory, Ingredients, and other related information are also archived automatically.

The archival of MSDS data (not the simple deletion of unused MSDS records) is important to determine the contents of the database at any time during the past. This makes it simple to satisfy regulations that require the availability of previous information, whether or not the data is currently active in the database.

Another reason to archive unused data is to improve the performance of the database system. The data records are physically moved into an alternate set of data tables located internally in the data file, which increases the performance of searches and sorts on the active data tables, and increases the security of the data which has been archived.

The interface for the Archive is identical to the interface for the Product *Output* and *Data Entry forms*, however it is not possible to modify any data or to import into the Archive tables.

Archiving Products

To archive active Products:

1. **Open the Products *Output form*.**
2. **Select Product records.**
3. **Choose *Archive Selected Products* from the *Selection menu*.**
4. **Confirm the archive date and click OK to continue.**



Activating Archived Products

To activate archived Products:

1. **Open the Archive *Output form*.**
2. **Select (highlight) Product records.**
3. **Choose *Activate Selected Products* from the *Selection menu*.**

The selected Products will be available once again in the active Product *Output form*.



Password Editor

User Profiles, Passwords, and System Policies are edited from the *Password editor*.

Users & Groups

Multiple User Roles are available, allowing persons accessing MSDSpro to be permitted or limited to performing certain functions within the software.

The ability to add, modify, and delete data depends on the authorization granted to the specific user name:

<u>User Role</u>	<u>Access Group</u>	<u>Privilege</u>
<i>Database Owner (DBO)</i>	Database Owner	Password Editor Only (DBO is optional)
<i>Database Administrator (DBA)</i>	DB Admin	View Records Add Records Edit Records Delete Records Import/Export from all tables Archives Password Editor (If DBO not engaged) System Preferences All Update Options Reports
<i>EHS</i>	Edit	View Records Add Records Edit Records Delete Records Import/Export from all tables Archives All Update Options Reports
<i>Supervisor</i>	Browse	View Records Basic Reports & Labels
<i>Viewer/User & Web User</i>	-	Read-only MSDS viewing interface

Password Editor - User Profiles Tab

The **User Profiles tab** allows an MSDSpro Administrator to create new User Names and link them to specific employees. The Administrator can also specify other characteristics of the User Names such as the dates the User Name begins and ceases to be valid.

The default installation of MSDSpro contains specific User Names and Groups that contain those User Names. Each User belongs to one Group. Each Group can have many Users.

Standard password modification features and profile settings are supported.

To create or modify a User Profile:

1. **Select the User Name in the scrolling list from the User Name field OR click on the NEW button.**
2. **Enter the User Name for a new profile or edit the existing User Name to modify an existing profile.**
3. **Enter or Edit Assigned Group, Password, and associated Date fields.**
4. **Click on the SELECT button to choose an employee record to link to the User Name.**
5. **Click on the SAVE button to save changes or the CANCEL button to discard changes.**

Modification of these settings apply immediately after choosing to **SAVE** the modifications.



The screenshot shows the 'Password Editor' dialog box with the 'User Profiles' tab selected. The dialog has three tabs: 'User Profiles', 'System Policies', and 'ODBC Connections'. On the left, there is a list of 'User Names' containing 'DBA', 'EHS', and 'Supervisor'. To the right of this list are several input fields: 'User Name', 'Group' (a dropdown menu), 'Password', 'Confirm Password', 'Employee' (with 'Select' and 'Clear' buttons), 'Account Use Start Date', 'Account Expires Date', 'Password Use Start Date', and 'Password Expires Date'. At the bottom, there are two checkboxes: 'User Must Change Password at Next Logon' and 'Account Disabled'. At the very bottom of the dialog are buttons for 'New', 'Delete', 'Cancel', 'Save', and 'Done'.

- **Check the User Must Change Password at Next Logon checkbox to force the MSDSpro Administrator to change the password associated with the User Profile the next time they login.**
- **Check the Account Disabled checkbox to prevent a login using this User Profile.**

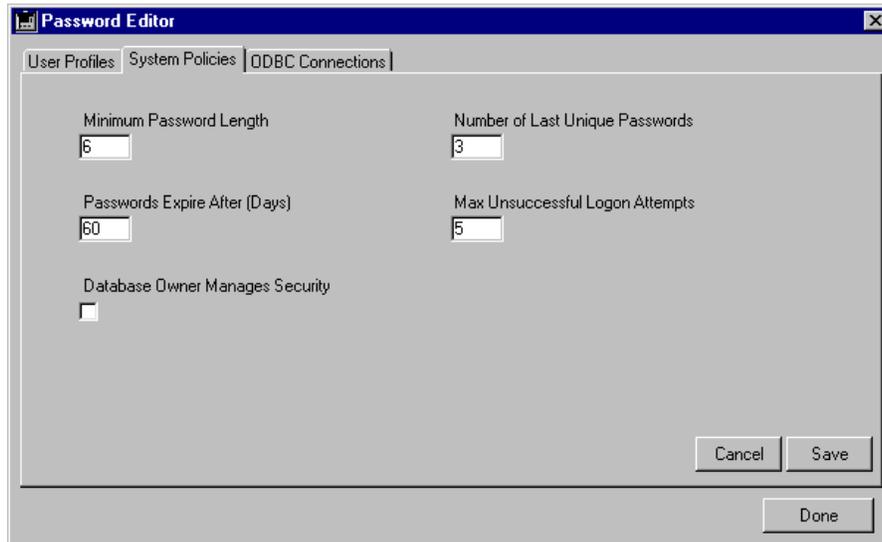
Password Editor - System Policies Tab

The **System Policies tab** allows global password behaviors to be implemented.

By selecting **Database Owner Manages Security**, a special User Name will be created called "Database Owner". This will be the only User Name which will have access to the *Password editor* after being created. By default, the Database Owner password is "dbo" and must be changed the first time the Database Owner successfully logs on. Once created, only the Database Owner will have privileges to access the *Password editor*.

To remove the Database Owner after being created, the Database Owner must successfully logon to the system and deselect **Database Owner Manages Security**.

Modification of these settings apply immediately after choosing to **SAVE** the modifications.



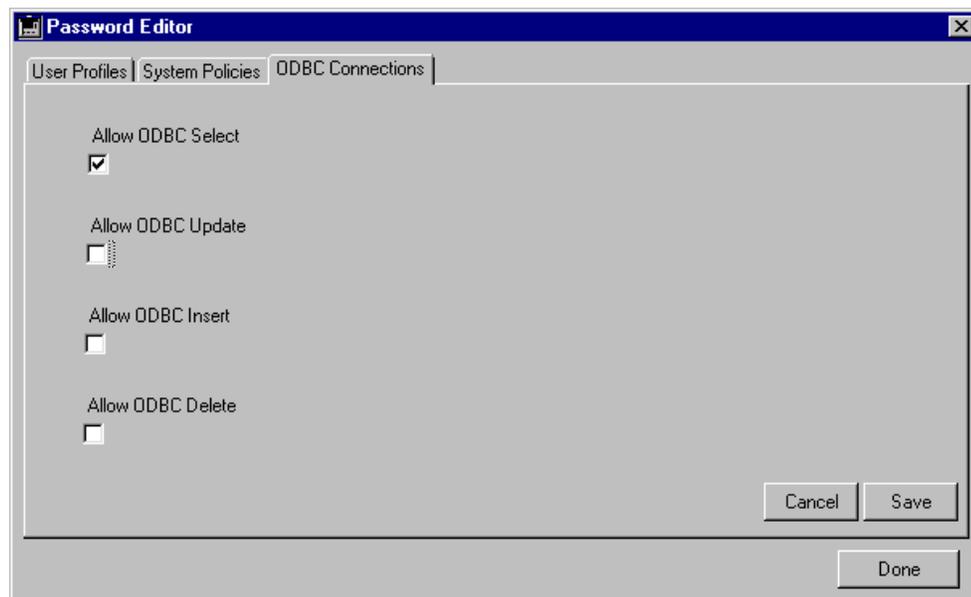
Password Editor - ODBC Connections Tab

The **ODBC Connections tab** allows specific privileges to be assigned to incoming ODBC connections from other application systems. ODBC is the Open DataBase Connectivity standard that allows databases of various design and technology to share data.

ODBC is available with MSDSpro Enterprise Server. Contact your MSDSpro representative for more information on how to enable ODBC data access from your MSDSpro database system.

- **Allow ODBC Select:** Allows an ODBC connection to view records.
- **Allow ODBC Update:** Allows an ODBC connection to edit records.
- **Allow ODBC Insert:** Allows an ODBC connection to add records.
- **Allow ODBC Delete:** Allows an ODBC connection to delete records.

Modification of these settings apply immediately after choosing to **SAVE** the modifications.



Preferences

Preferences are available to the DBA system role to modify certain behaviors and selections. Any modification to preferences will immediately effect other MSDSpro users.

Preferences - Company Information Tab

The screenshot shows the 'Administrative Preferences' dialog box with the 'Company Information' tab selected. The fields are as follows:

- Company Name: Snowflower, Inc.
- Address: 123 Main Street
- City: Oklahoma City
- State or Province: OK
- Postal Code: 77856
- Contact Name: Sam Smith
- Phone: (907) 555-1212
- Contact E-Mail Address: samsmith@snowflowerinc.com
- Document Preparer: OT Jones
- Preparer Phone: (907) 555-1212
- Company Federal Identification Number: 91-0123456
- Company Logo: A logo for Snowflower, Inc. featuring a snowflake and a green plant.

Buttons include 'Load Logo...', 'Clear Logo', 'Cancel', and 'Save'.

- **Company Information fields are used on various reports generated by the system.**
- **Contact Name and E-Mail address are used when sending an Manufacturer Update Request E-Mail.**
- **Company Logo is the graphic image used on some reports that are generated by MSDSpro. Click CLEAR LOGO to clear the graphic image.**

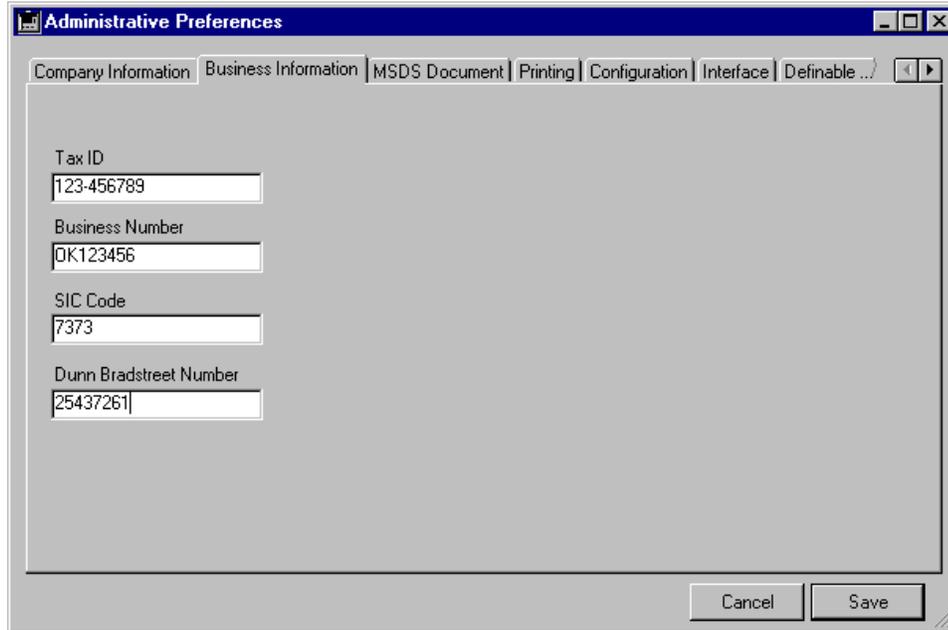
To load and use the **Company Logo**:

1. **Click LOAD LOGO... to select an image file from hard disk.**

*NOTE: The **Company Logo** is also used by MSDSpro Enterprise and PlusWeb web browser interfaces if the Web Server Control Panel does not specify an existing alternate graphic image.*

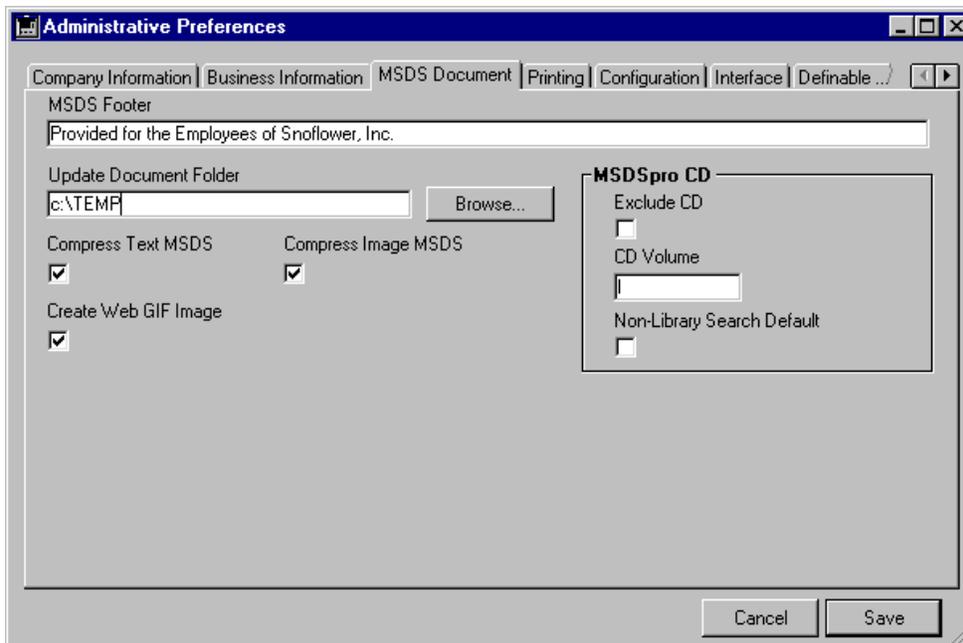
Preferences - Business Information Tab

Business Information fields are used by various reports generated by MSDSpro.



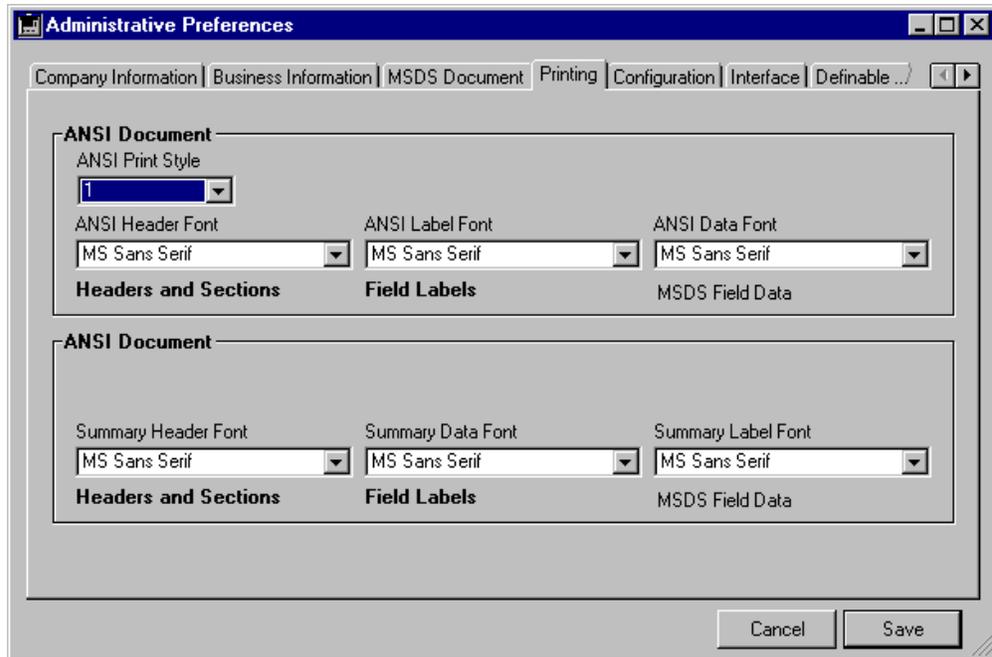
The image shows a screenshot of the 'Administrative Preferences' dialog box. The title bar reads 'Administrative Preferences'. Below the title bar is a tabbed interface with the following tabs: 'Company Information', 'Business Information', 'MSDS Document', 'Printing', 'Configuration', 'Interface', and 'Definable ...'. The 'Business Information' tab is currently selected. The main area of the dialog contains four text input fields, each with a label above it: 'Tax ID' (containing '123-456789'), 'Business Number' (containing 'OK123456'), 'SIC Code' (containing '7373'), and 'Dunn Bradstreet Number' (containing '25437261'). At the bottom right of the dialog are two buttons: 'Cancel' and 'Save'.

Preferences - MSDS Document Tab



- **MSDS Footer:** A single line of text that will be printed in the footer of each MSDS document page (ANSI or Text MSDS documents only.)
- **Update Document Folder:** The location of the folder on the local hard disk in which the system expects to find the import disk files containing MSDS documents, used by *Update MSDS From Hard Disk*, located in the *Updates* area.
- **Compress Text MSDS:** Turns ON or OFF the internal compression of Text MSDS documents. Default is ON.
- **Compress Image MSDS:** Turns ON or OFF the internal compression of Image MSDS documents. Default is ON.
- **Create Web GIF Image:** Turns ON or OFF the internal creation of GIF images for display of Image MSDS documents for Web users. Default is ON.
- **Exclude CD:** Turns ON or OFF use of the MSDSpro CD. Default is OFF.
- **CD Volume:** The letter of the drive containing the MSDSpro CD.
- **Non-Library Search Default:** Turns ON or OFF library searches as search default. Default is OFF.

Preferences - Printing Tab



- **ANSI Print Style:** Determines which printing template to use when printing ANSI MSDS documents. Default is 1.
- **ANSI Fonts:** Determines which fonts to use on the 3 ANSI document template areas.
- **Summary Fonts:** Determines which fonts to use on the 3 Summary template areas.

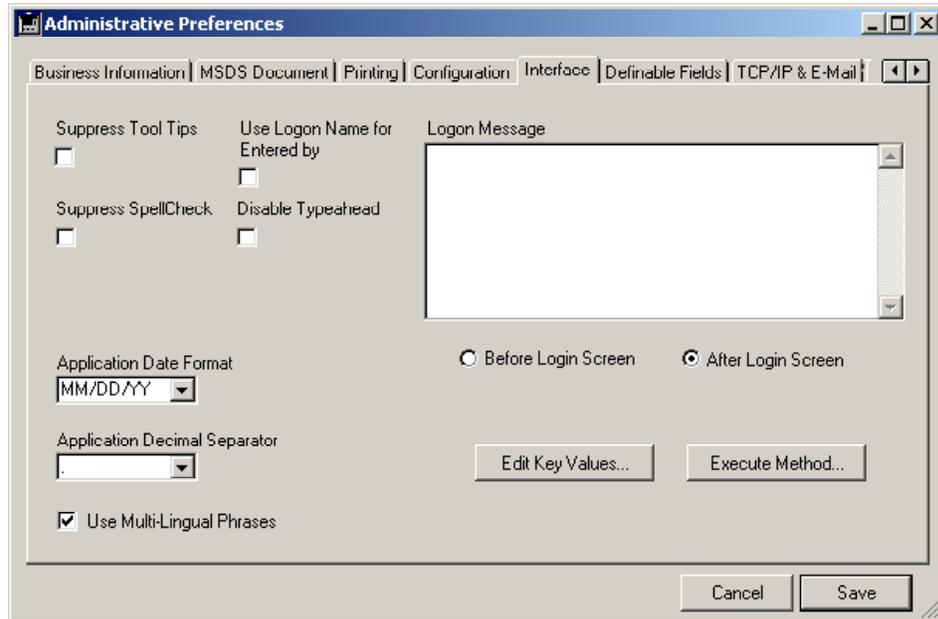
Preferences - Configuration Tab

- **Auto Logoff Time:** Specifies the length in minutes that the system will wait before logging off an inactive user. Default is 15.
- **Max Search Results:** The default number of records to return when performing searches. Default is 1000.
- **MSDS ID Prefix:** The alphanumeric beginning to each MSDS ID.
- **Number of MSDS ID Places:** The number of places to use when automatically numbering MSDS ID values for new Product records.
- **Inventory Synchronization:** Specific fields for an integrated Inventory synchronization routine.
- **4 Digit Year Entry:** Turns ON or OFF the forced 4 digit entry of years. When OFF, a pivot year is used (see next item, Pivot Year). When ON, the user must enter all 4 digits of the year during date entry. Default is OFF.
- **Pivot Year:** Specifies which year to use as a pivot during date entry. If the year entered is equal to the pivot year or higher, the current century (1900) will be used. If the year entered is less than the pivot year, the next century will be used (2000). Default is 50.
- **Max Log File Days:** The number of days in which to keep log files of system activity.

Preferences - Configuration Tab (Cont'd)

- **No Edit Log:** Turns ON or OFF the internal edit log system. When turned OFF, MSDSpro will create a log record for each modification to any record within the system. When turned ON, no edit log records will be created, and the EDIT LOG buttons are hidden on all screens. Default is OFF.
- **Product Log:** Create a log file tracking changes made to a product record
- **Email Product Changes:** Automatically generates an email to be sent to a specified user or users when changes are made to a product record.
- **Dialog Options:** Determines whether the *Admin* and *Reports Control Panel* remain open until closed by the user. If unchecked the *Control Panels* close once a selection has been made from them.
- **Disable SARA Reports:** Disables the SARA Reporting functions within MSDSpro.
- **SARA Hazardous Reports:** Specifies product quantities in pounds above which a product will be included in the SARA Report.
- **RESET REGISTRATION:** Reset the registration information originally entered for MSDSpro. Contact MSDSpro for the reset password and your organization's new registration information if this is required.

Preferences - Interface Tab



- **Suppress Tool Tips:** Turns ON or OFF tool tips present on screens. Default is OFF.
- **Suppress Spell Check:** Turns ON or OFF Spell Checking throughout data entry screens within MSDSpro. Default is OFF.
- **Use Logon Name For Entered by:** Display the User Name when a MSDS is entered.
- **Disable Typeahead:** Turns off Typeahead functionality
- **Execute Method:** Enter in commands for advanced programming.

Preferences - Interface Tab (Cont'd)

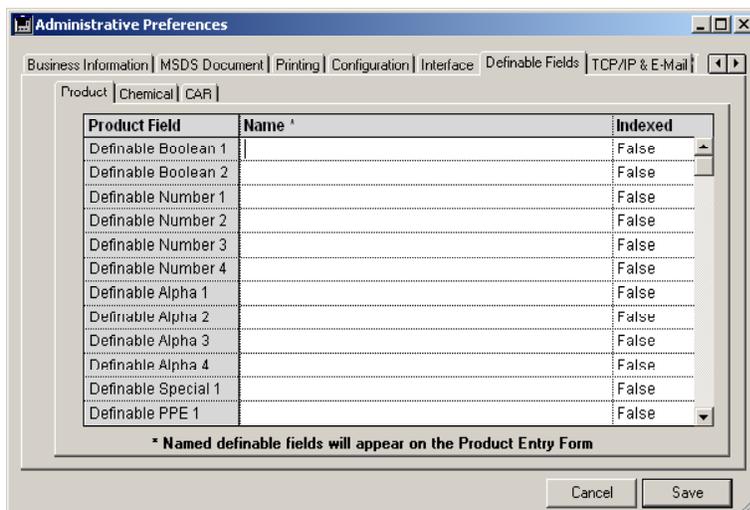
- **Application Decimal Separator:** Determines the default decimal separator. Default is “.”
- **Logon Message:** Allows a generic message to be displayed when a user successfully logs into MSDSpro. The user must click the OK button to continue after reading the Logon Message.
- **Before/After Login Screen:** Determines whether the Logon Message is displayed before or after the user has successfully logged onto MSDSpro. Default is AFTER.

Preferences - Definable Fields Tab

MSDSpro provides for 13 customizable fields to be added to the Product table, and 12 to the Chemical table, and 8 to the CAR table. These fields can be used to store any additional product or chemical information the company that has purchased MSDSpro would like to have.

The Definable fields on the **Product subtab** consist of:

- (2) Boolean fields (Yes/No, True/False)
- (4) Number fields (Real number, with decimal precision to 15 places)
- (4) Alpha (Alphanumeric up to 80 characters)
- (2) Definable PPE (Yes/No, True/False)
- **Definable Special (Yes/No, True/False)** If defined products with this flagging will appear with an * on searches from the web.

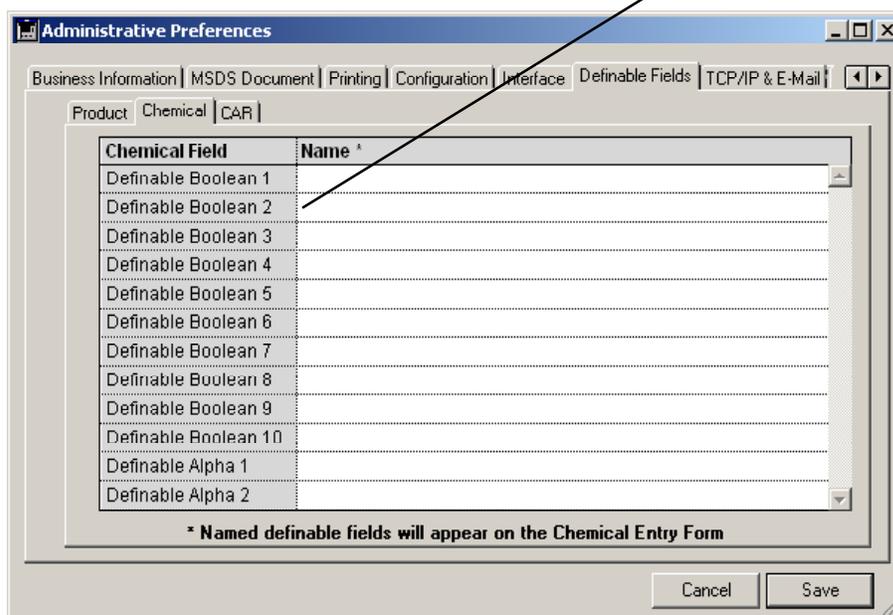


Preferences - Definable Fields Tab (Cont'd)

The Definable fields on the **Chemical subtab** consist of:

- (10) Boolean fields (Yes/No, True/False)
- (2) Alpha (Alphanumeric up to 80 characters)

Click the mouse cursor here and start typing to add a Chemical Definable Field.



- The definable fields listed on the **Product subtab** are physically located in the Product table and appear on the **Product Data Entry form Specific tab**.
- The definable fields listed on the **Chemical subtab** are physically located in the Chemical table and appear on the **Chemical Data Entry form Definable Fields tab**.

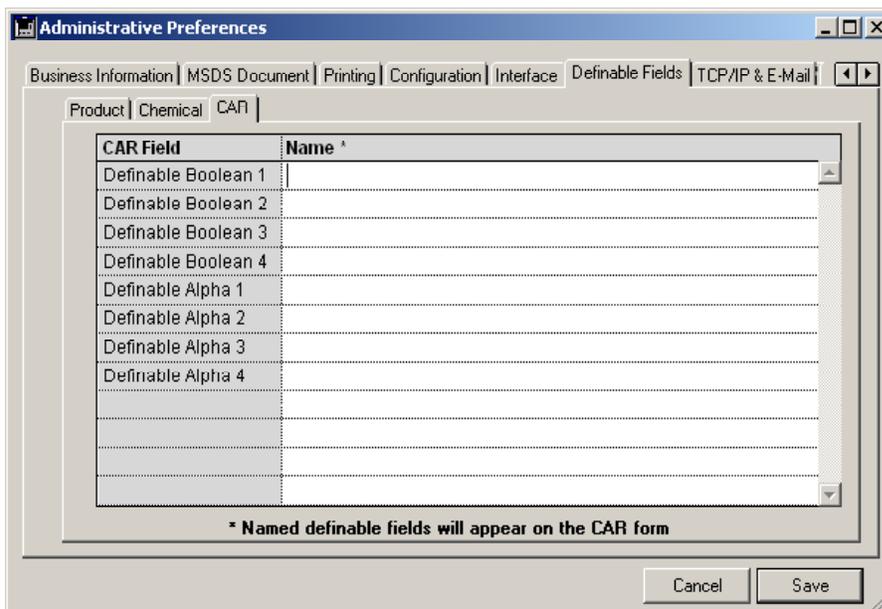
The Definable field names must be customized before the fields will appear on the associated *Data Entry form*. Simply type the name the field should appear with, and it will be reflected in the *Data Entry form*, *Query editor*, *Sort editor*, and *Quick Report editor*.

Any of the Definable fields may be indexed. This will make searches using the Definable field much faster than a normal field. *Note: An indexed field can use considerably more space on the hard drive when indexed.*

Preferences - Definable Fields Tab (Cont'd)

The Definable fields on the **CAR** tab consist of:

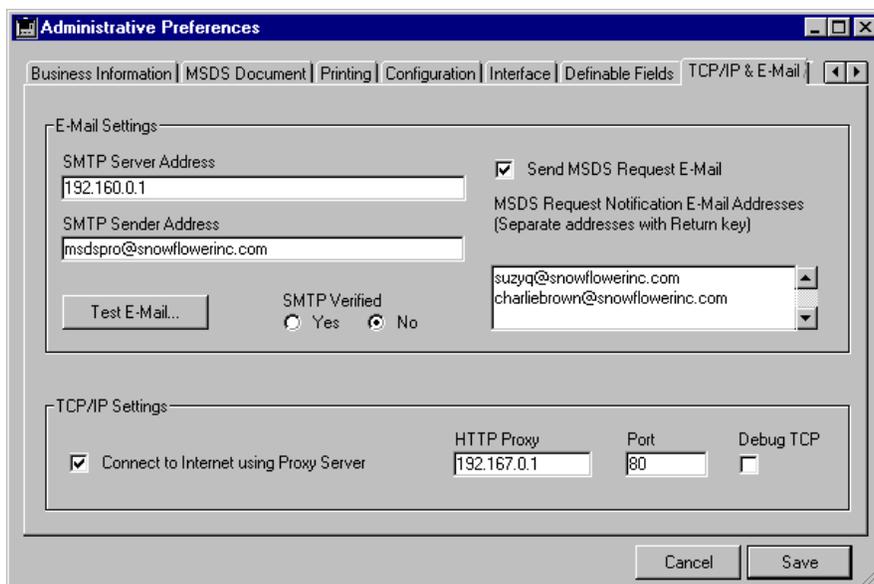
- (4) Boolean fields (Yes/No, True/False)
- (4) Alpha (Alphanumeric up to 80 characters)



Preferences - TCP/IP & E-Mail Tab

MSDSpro can automatically e-mail a notification when an MSDS Request is submitted by an MSDSpro user.

MSDSpro e-mail functions through use of SMTP (Simple Mail Transfer Protocol), the Internet standard e-mail protocol. Virtually any e-mail server will allow SMTP e-mail to be sent and received. After entering the appropriate **SMTP Server Address** and **SMTP Sender Address**, click **TEST E-MAIL** to allow MSDSpro to send a test e-mail and verify the connection. If the test is successful, **SMTP Verified** will be "Yes". If the test is not successful, **SMTP Verified** will remain as "No" and the e-mail system is not activated.



Preferences - TCP/IP & E-Mail Tab (Cont'd)

- **SMTP Server Address:** The SMTP server name. Example: domino.acme.com, or 192.168.0.1.
- **SMTP Sender Address:** The SMTP address of the sender's e-mail account. Example: msdspro@snowflowerinc.com. This is the e-mail account the messages will originate from.
- **Send MSDS Request E-Mail:** Turns on the capability to send an e-mail notification when an MSDS Request has been submitted (only after the SMTP settings have been verified.)
- **MSDS Request Notification E-Mail Addresses:** The e-mail address(es) to notify when an MSDS Request is submitted (separate addresses by typing the Return key between addresses.)
- **TEST E-MAIL:** Used to test the SMTP settings, after SMTP Server Address and SMTP Sender Address have been entered. If the test is successful, SMTP Verified will be "Yes". If the test is not successful, SMTP Verified will remain as "No" and the e-mail system is not activated.

Optional settings can be configured if your organization requires the use of a Proxy Server to access the Internet:

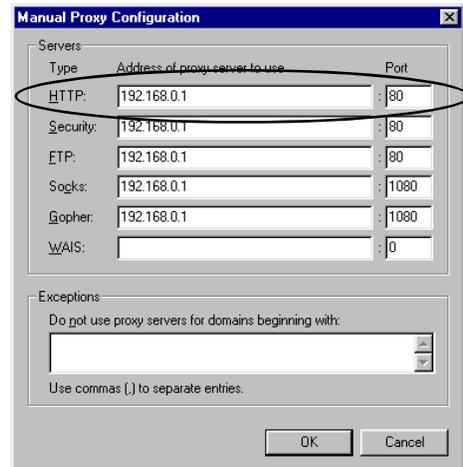
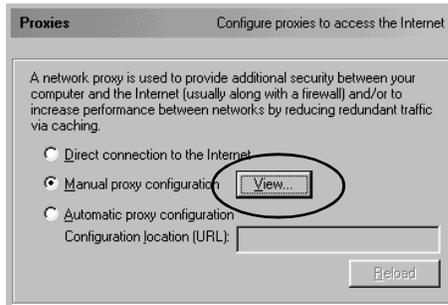
- **Connect to Internet Using Proxy Server:** Is used when the company network requires that a Proxy Server is used to connect to the Internet (for security purposes, as a firewall).
- **HTTP Proxy:** Is the address of the Proxy Server.
- **Port:** The port which the Proxy Server will permit HTTP traffic on (usually 80).
- **TCP Debug:** Selecting this option will turn on the debug mode for TCP/IP requests. This option requires a password and should only be used to troubleshoot problems that may be occurring with the TCP/IP Internet requests. Contact MSDSpro Technical Support for assistance.

If your organization uses a Proxy Server, MSDSpro must be configured to function with it in order to use the Internet. The following are two examples of how to acquire the settings used for the Proxy Server configuration (both Netscape Navigator and Internet Explorer are used as examples.)

Preferences - TCP/IP & E-Mail Tab (Cont'd)

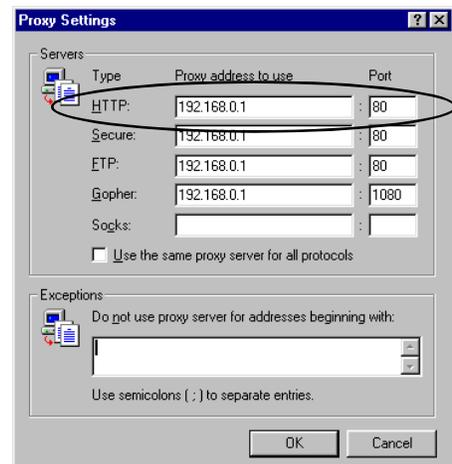
Using Netscape Navigator®:

1. Select **Preferences...** from the **Edit menu**.
2. Choose to expand **Advanced**.
3. Select **Proxies**.
4. Click **VIEW**.



Using Internet Explorer®:

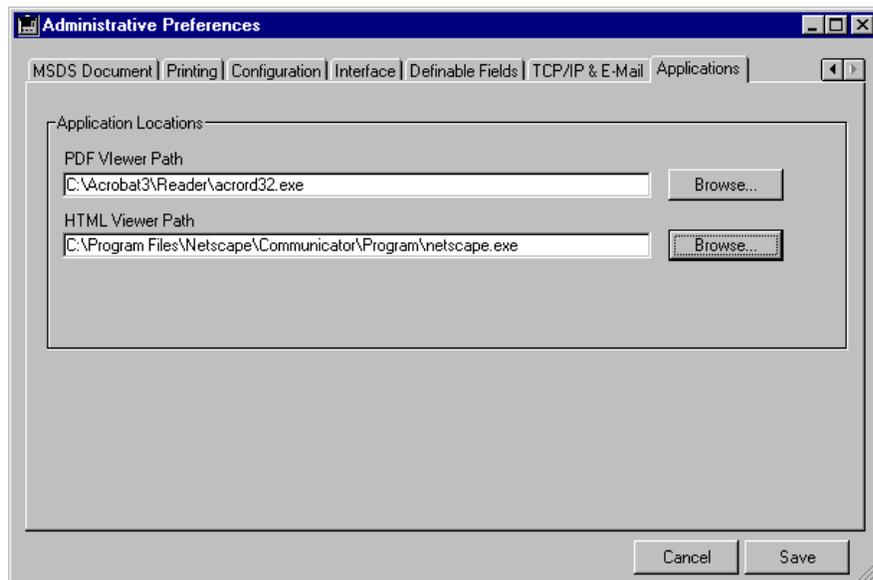
1. Select **Internet Options...** from the **Tools menu**
2. Choose the **Connections tab**
3. Click **LAN SETTINGS**
4. Click **ADVANCED**



Preferences - Applications Tab

The **Applications tab** specifies the default location of additional “helper” applications which may be used to open and/or print external documents.

Click on the **BROWSE** button to locate the application executable (.exe) file for each application type, if required.



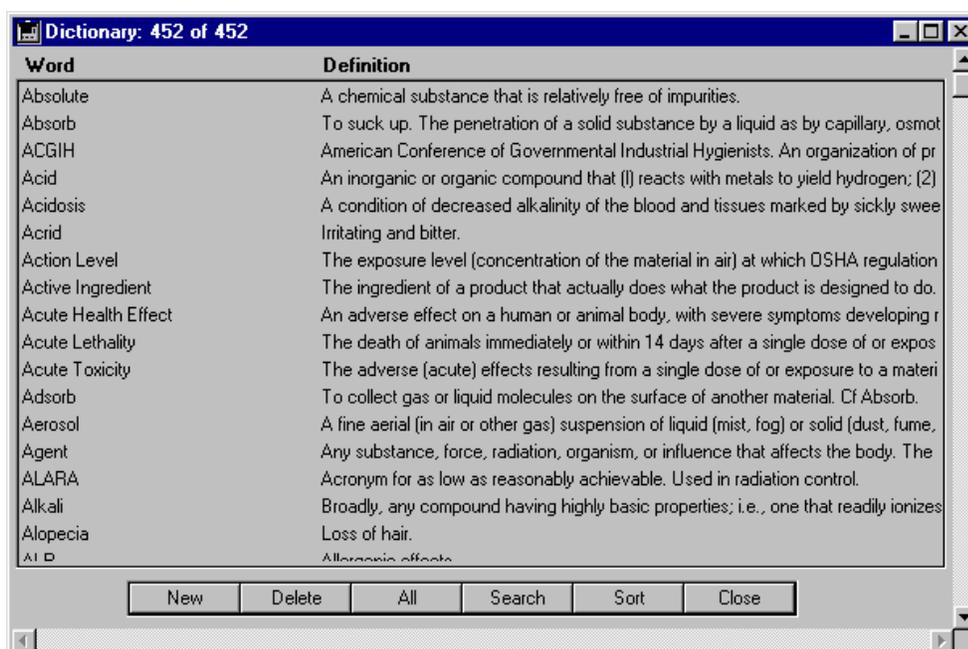
NOTE: *It is important to locate and specify the PDF Viewer Path and HTML Viewer Path in order to print PDF and HTML documents correctly.*

Dictionary

The Dictionary table is used to store commonly used words and definitions. These definitions are made available to the system users through the MSDS Document Define Word button.

The NFPA/HMIS Hazard Definitions are also stored in the Dictionary table, and can be edited at any time.

Dictionary Output Form



The screenshot shows a window titled "Dictionary: 452 of 452". It contains a table with two columns: "Word" and "Definition". The table lists various terms and their meanings. At the bottom of the window, there are buttons for "New", "Delete", "All", "Search", "Sort", and "Close".

Word	Definition
Absolute	A chemical substance that is relatively free of impurities.
Absorb	To suck up. The penetration of a solid substance by a liquid as by capillary, osmot
ACGIH	American Conference of Governmental Industrial Hygienists. An organization of pr
Acid	An inorganic or organic compound that (1) reacts with metals to yield hydrogen; (2)
Acidosis	A condition of decreased alkalinity of the blood and tissues marked by sickly swee
Acrid	Irritating and bitter.
Action Level	The exposure level (concentration of the material in air) at which OSHA regulation
Active Ingredient	The ingredient of a product that actually does what the product is designed to do.
Acute Health Effect	An adverse effect on a human or animal body, with severe symptoms developing r
Acute Lethality	The death of animals immediately or within 14 days after a single dose of or expos
Acute Toxicity	The adverse (acute) effects resulting from a single dose of or exposure to a materi
Adsorb	To collect gas or liquid molecules on the surface of another material. Cf Absorb.
Aerosol	A fine aerial (in air or other gas) suspension of liquid (mist, fog) or solid (dust, fume,
Agent	Any substance, force, radiation, organism, or influence that affects the body. The
ALARA	Acronym for as low as reasonably achievable. Used in radiation control.
Alkali	Broadly, any compound having highly basic properties; i.e., one that readily ionizes
Alopecia	Loss of hair.
Allergic effects	Allergic effects

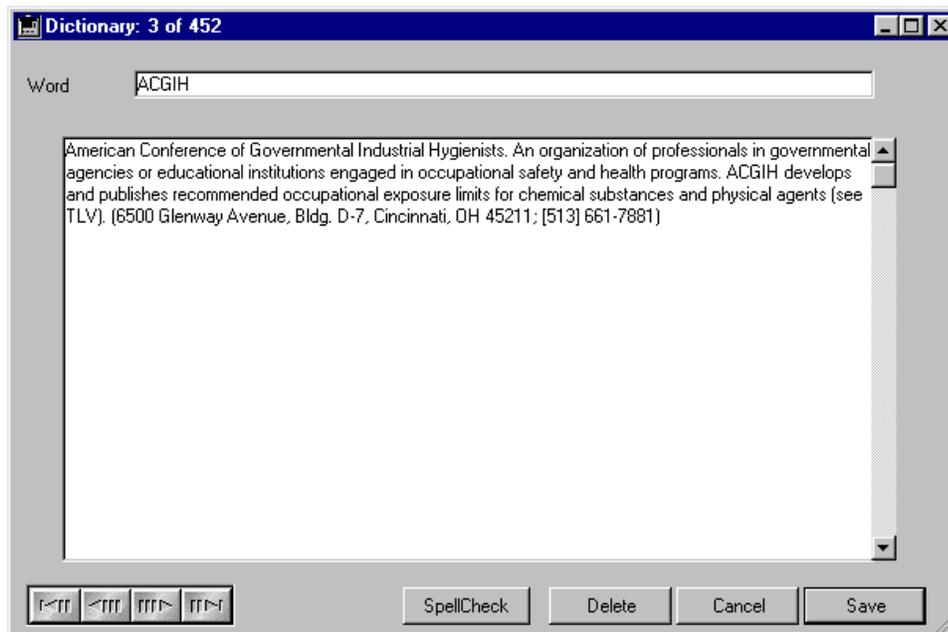
Dictionary Data Entry Form

The Dictionary table is used to store commonly used words and definitions. These definitions are made available to the system users through the MSDS Document Define Word button.

The NFPA/HMIS Hazard Definitions are also stored in the Dictionary table.

The NFPA records are stored with words starting with "N". The Type of Rating is "H", "F", or "R". For example, the definition for NFPA Health 2 is stored in the Dictionary record as word "NH2", etc.

The HMIS records are stored with words starting with "H". The Type of Rating is "H", "F", or "R". For example, the definition for HMIS Health 2 is stored in the Dictionary record as word "HH2", etc.

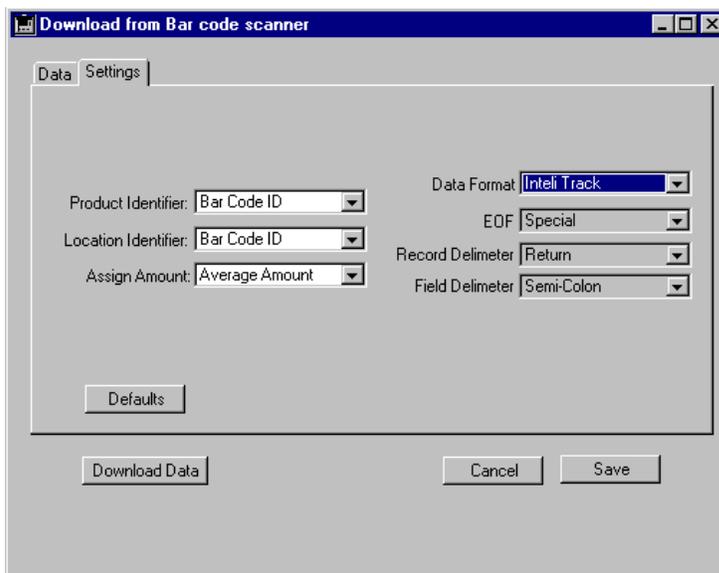


Download from Bar Code Scanner

The *Download from Bar Code Scanner* function allows Inventory information that has been loaded into a hand-held Bar Code scanner to be downloaded into MSDSpro Inventory. The Inventory created is a “snapshot” of the current Inventory. MSDSpro assumes that the amount scanned is the total amount of the Product that is currently stored at the specified Location.

To Download Inventory information from a Bar Code Scanner:

1. Select **Download from Bar Code Scanner** from the **Admin Control Panel**.
2. Click the **Settings** tab.
3. Check the settings.



The screenshot shows a dialog box titled "Download from Bar code scanner" with a "Settings" tab selected. The dialog contains several dropdown menus for configuration:

- Product Identifier: Bar Code ID
- Location Identifier: Bar Code ID
- Assign Amount: Average Amount
- Data Format: Intelli Track
- EOF: Special
- Record Delimiter: Return
- Field Delimiter: Semi-Colon

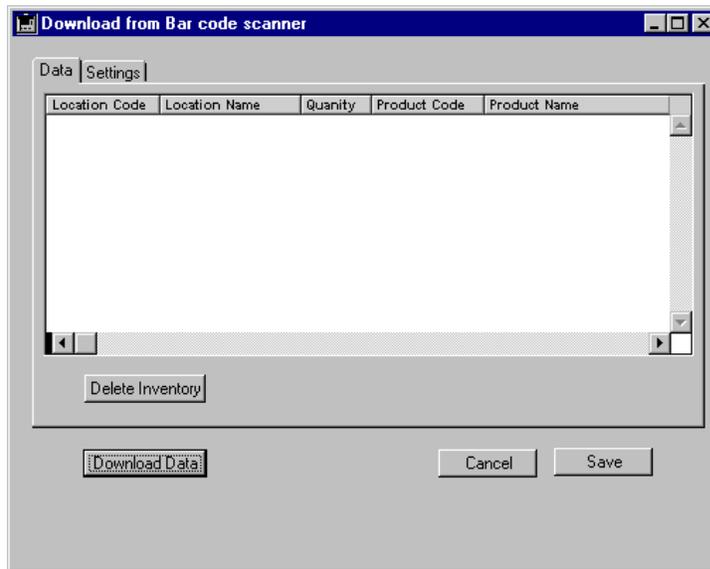
At the bottom of the dialog, there are four buttons: "Defaults", "Download Data", "Cancel", and "Save".

- **Product Identifier:** This field sets how MSDSpro will relate the Bar Code ID to the Product in MSDSpro. The choices are Bar Code ID, Stock Number, or MSDS ID.
- **Location Identifier:** This field sets how MSDSpro will relate the Location information to the specific Location in MSDSpro. The choices are Bar Code ID or Location ID.
- **Assign Amount:** The quantity set on the Bar Code scanner can be assigned to either the Average Amount Daily or the Maximum Amount Daily fields.
- **Data Format:** This setting describes how the data will be transferred from the scanner to MSDSpro. Please contact your MSDSpro Sales Consultant for status on other supported formats.

Download from Bar Code Scanner (Cont'd)

- Defaults: Restores the default download settings.

4. Click the *Data* tab.



5. Click the **DOWNLOAD** button to download the data.

6. Verify the downloaded data for accuracy and completeness.

Confirm that the correct Locations, Products and quantities have been downloaded. Incorrect items can be deleted by selecting the item and clicking the **DELETE INVENTORY** button.

7. Click the **SAVE** button to save the data.

Web Server Configuration

The Web Server Configuration radio button allows an MSDSpro Administrator to access the MSDSpro Web Server Control Panel. The MSDSpro Web Server Control Panel is described on pages 9-2 through 9-10.

Using Product Packages to Import or Export Data

An MSDSpro Product Package is a disk file that contains one or more Product records and associated MSDS Document (Images, Text, ANSI, PDF, HTML), Synonyms, Ingredients, Inventory, etc.

Product Packages are collections of MSDS Product information that are designed to be moved from one MSDSpro installation to another. This allows safe and secure transfer of MSDSpro data in a convenient manner among organizations and work locations.

The Product Package can be password protected if required. If a password is assigned when the Product Package is exported, MSDSpro will import the Product Package only if the correct password is given. If an MSDS ID value is present in the imported Product Package that matches an existing MSDS ID, you will be prompted.

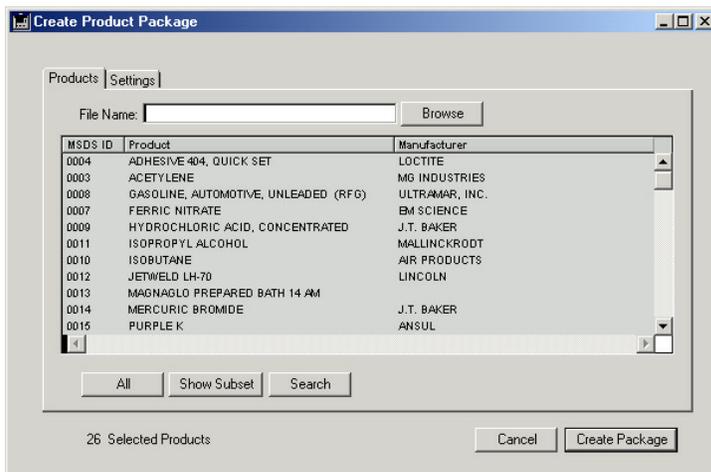
An MSDSpro Product Package cannot be used by any other MSDS software system. It is based on an advanced internal format which is only utilized by MSDSpro and no other MSDS software.

When using the optional MSDSpro Scanning Services to supplement your organization's MSDS data entry, the MSDS data may be returned to you as Product Packages that are imported from CD-ROM. Please contact your MSDSpro representative for more information about MSDS Scanning Services.

To Create a Product Package:

1. Select **Create Product Package** from under the **Special Functions** tab.

Selecting *Create Product Package* loads the *Create Product Package Data Entry* form.

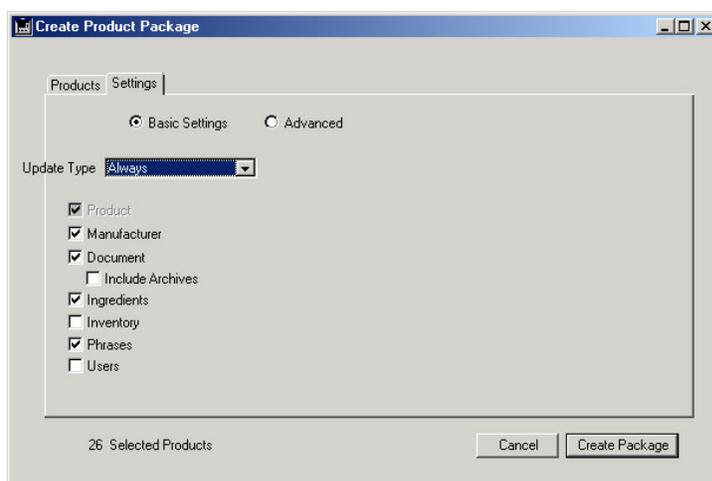


- Click on the **ALL** button to list all the product records.
- Click on the **SHOW SUBSET** button to show only the highlighted records.
- Click on the **SEARCH** button to search for Product Records matching a specific criteria.

Using Product Packages to Import or Export Data (Cont'd)

2. Click on the **BROWSE** button to name the **Product Package** and select the location to which it will be saved.
3. Click on the **Settings tab** to select the information to be exported into the **Product Package**.

Information available to be exported includes Manufacturer, Document, Ingredients, Inventory, Phrases and User information.



4. Select the desired option from the **Update Type** field.
5. If desired, click on the **Advanced** radio button to select additional options.
6. Click on the **CREATE PACKAGE** button to create the **Product Package** or the **CANCEL** button to close the *Create Product Package Data Entry form*.

To Import a Product Package:

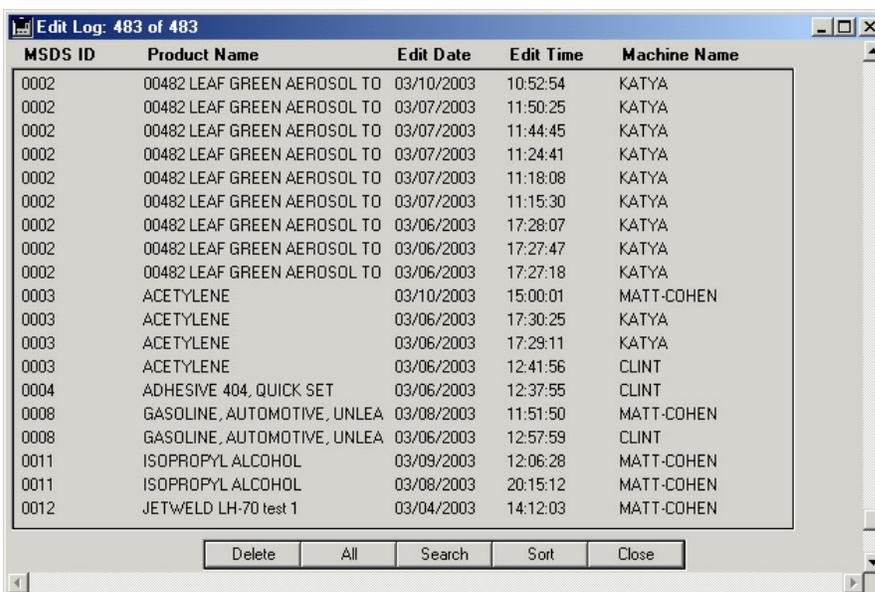
1. Select **Import Product Package** from under the **Special Functions tab**.
2. Browse to and select the **MSDSpro Product Package** file to import.

Only a **MSDSpro Product Package** file can be imported using *Import Product Package* from under the *Special Functions tab*.

3. **MSDSpro** will import the **Product Package**.

Edit Logs

The Edit Logs radio button allows an MSDSpro administrator to view the specific changes that were made to a product record and when those changes were made. Each edit log record shows one occurrence of changes being made to a product record. If a product record is edited multiple times then multiple edit logs are created. Logging is disabled by default. Enabling logging is covered on page 6-12 and 6-13. Selecting Edit Logs from the Admin Control Panel prompts the user to list all records, search for a specific record or add a new record. Selecting Search for Records loads the Query Editor, covered on pp. 3-8 through 3-12. Selecting Add Records loads the *Log Data Entry Form*, covered on pp. 6-24. Selecting List All records loads the *Log Output form*. The *Log Output form* allows for six actions.



MSDS ID	Product Name	Edit Date	Edit Time	Machine Name
0002	00482 LEAF GREEN AEROSOL TO	03/10/2003	10:52:54	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/07/2003	11:50:25	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/07/2003	11:44:45	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/07/2003	11:24:41	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/07/2003	11:18:08	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/07/2003	11:15:30	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/06/2003	17:28:07	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/06/2003	17:27:47	KATYA
0002	00482 LEAF GREEN AEROSOL TO	03/06/2003	17:27:18	KATYA
0003	ACETYLENE	03/10/2003	15:00:01	MATT-COHEN
0003	ACETYLENE	03/06/2003	17:30:25	KATYA
0003	ACETYLENE	03/06/2003	17:29:11	KATYA
0003	ACETYLENE	03/06/2003	12:41:56	CLINT
0004	ADHESIVE 404, QUICK SET	03/06/2003	12:37:55	CLINT
0008	GASOLINE, AUTOMOTIVE, UNLEA	03/08/2003	11:51:50	MATT-COHEN
0008	GASOLINE, AUTOMOTIVE, UNLEA	03/06/2003	12:57:59	CLINT
0011	ISOPROPYL ALCOHOL	03/09/2003	12:06:28	MATT-COHEN
0011	ISOPROPYL ALCOHOL	03/08/2003	20:15:12	MATT-COHEN
0012	JETWELD LH-70 test 1	03/04/2003	14:12:03	MATT-COHEN

- Click on the **DELETE** button to remove the highlighted log record.
- Double-click on a highlighted record to view its contents.
- Click on the **ALL** button to view the entire list of log records.
- Click on the **SEARCH** button to search for log records matching a specific criteria.
- Click on the **SORT** button to sort the log records alphabetically.
- Click on the **CLOSE** button to close the *Logs Output form*.

Edit Logs (Cont'd)

Edit Logs Data Entry form

Double-clicking on an entry in the Edit Logs Output form loads the *Edit Logs Data Entry form*. The *Edit Logs Data Entry form* shows a list of what changes were made to the product record at a single point in time, the date and time that those changes were made and the login name that the administrator who made the changes was using.

MSDS ID: 0012
Product Name: JETWELD LH-70 test 1
Edit Date: 03/04/03
Edit Time: 14:12:03
User: DBA
Machine Name: MATT-COHEN
Network ID: matt

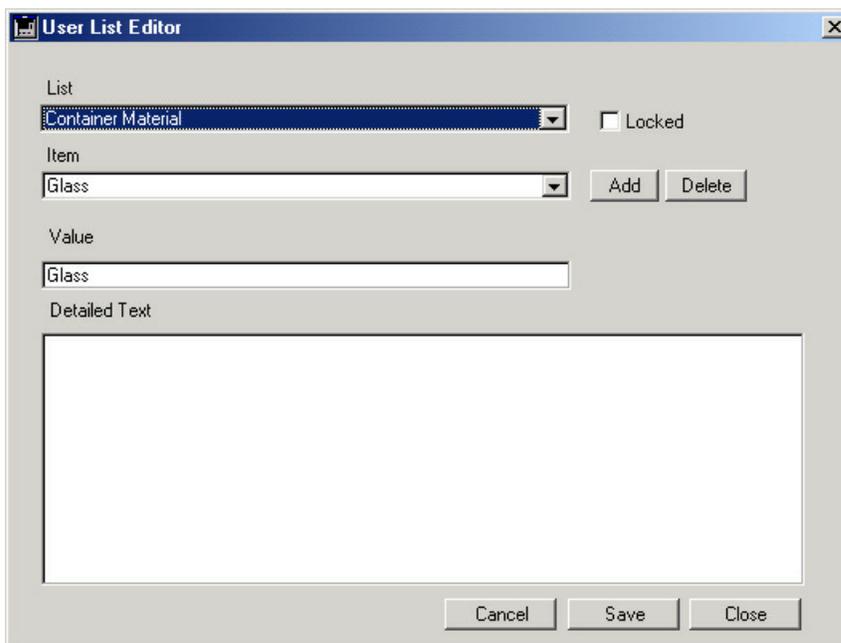
Changes to Product: JETWELD LH-70 test 1
MSDS ID: 0012
User Name: DBA
Edit Date: 3/4/2003
Edit Time: 14:15:15
Product Name : JETWELD LH-70 -> JETWELD LH-70 test 1

OK

- The Edit Date field shows the date the changes listed in this edit log record occurred.
- The Edit Time field shows the time the changes listed in this edit log record occurred.
- The User field shows the MSDSpro log in used by the administrator who made the changes.
- The Machine-Name field shows the name of the computer on the local network from which the changes listed in this edit log record were made.
- The Network ID field shows under what name the administrator whom made the changes was logged into the company network.
- The Log field shows what was entered into the fields that were changed before the changes were made and to what the data in the fields was changed.

Edit User Lists

The Edit User Lists radio button allows an MSDSpro administrator to view the lists that currently exist in MSDSpro and the specific description for each one. For example, the Container Material list shows all the different materials from which a container used to store a product may be made. Should a new type of container made of ceramic, Pyrex, or other material begin to be used, an MSDSpro Administrator could add it to the Container Material list by selecting Edit User Lists from under the *Special Functions tab*. Other users of MSDSpro could then select that Container Material from the appropriate pull down menu. Selecting Edit User Lists from the Admin Control Panel loads the *User List Editor Data Entry form*.



The screenshot shows a window titled "User List Editor". It features a "List" dropdown menu currently set to "Container Material", a "Locked" checkbox, an "Item" dropdown menu set to "Glass", and "Add" and "Delete" buttons. Below these is a "Value" text field containing "Glass" and a "Detailed Text" text area. At the bottom of the window are "Cancel", "Save", and "Close" buttons.

- Use the List pull down menu to select a specific list.
- The Locked checkbox indicates whether or not the list cannot be modified without the correct password.
- Use the Item pull down menu to choose a specific item in the selected list.
- Click on the ADD button to add a new Item to the selected list.
- Click on the DELETE button to delete the chosen Item from the selected list.
- The Value field indicates a value corresponding to the chosen Item.
- The Detailed Text field gives additional information on the chosen Item.

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Updates

Updates consist of:

- Update MSDS from Hard Disk
- Update MSDS from Internet
- Launch Web Browser to MSDS Links
- Synchronize with Provider
- Update MSDSpro CD Index
- Down Load from Bar code Scanner

Admin Control Panel

Updates are accessed from the *Admin Control Panel*.



Update MSDS From Hard Disk

Updating the MSDS Document from Text (ASCII), Image (all supported image types), and PDF disk files can be accomplished either singularly within the Product *Data Entry form* (click **IMPORT** from the **Document tab**), or by a batch update process from the *Updates* area (recommended).

To load and update MSDS documents from individual files within a single folder on the local hard disk:

- 1. Place MSDS files to load into the update folder (the default location in Preferences).**

File names should match the MSDS ID of the Product to be updated plus the file extension. For example, a product record with an MSDS ID of "12345" will match a text file called 12345.txt located in the update folder. If Images are to be loaded, place them in a folder named with the MSDS ID. The image files within the folder will be loaded in alphabetical order (001, 002 or A, B will become pages 1-2).

- 2. Select *Update MSDS From Hard Disk* from the *Admin Control Panel Updates* area.**

File names found in the update folder are compared to Product MSDS ID values. Verify that the Products listed match the files that are present in the update folder.

- 3. Verify the import date (the current date is the default).**

- 4. Verify the Archive Existing Document setting (archival is the default).**

If **Archive Existing Document** is selected, MSDSpro will archive the existing document if a replacement document is located and successfully loaded from the update folder. If it is not selected, it will only be overwritten by the replacement document if a replacement document is successfully loaded from the update folder. If no replacement is found, the existing document will not be replaced or archived.

- 5. Verify the Document language.**

Select the language in which the updated document is written. The language selection made here will be reflected in the language column within the attached documents window. See pp. 4-18. for more detail.

- 6. Click UPDATE FROM HARD DISK.**

A thermometer will appear showing the status of the update. All files that are successfully loaded are moved into a folder named "Processed", within the update folder.

Update MSDS From Internet

MSDS documents may be imported from the Internet into MSDSpro. MSDSpro remembers the location on the Internet from which the MSDS was imported. MSDSpro can then return to that same location on the Internet to check for an updated MSDS. An updated MSDS will be imported from the Internet only if the size of the MSDS or its last modified date has changed. By default, when an MSDS is updated, the old MSDS is archived unless the user has turned off this feature.

The *Update MSDS from Internet Output form* displays all the MSDS documents imported from the Internet, their last modified date and the URL from which they were imported. Buttons on the *Update MSDS from Internet Output form* allow the user to print the list of MSDS documents to be updated, remove MSDSs from the update list, or search the MSDSpro database.

The screenshot shows a window titled "Update MSDS from Internet" with two tabs: "Documents to Update" and "Updated Documents". The "Documents to Update" tab is active, displaying a table with the following columns: Status, MSDS ID, Product Name, Manufacturer, Type, Last Modified, and Location. The table contains 13 rows of data, all with a "Verify" status. Below the table are buttons for "Search", "Remove", and "Print View", along with an "Import Date" field set to "12/18/2001". At the bottom right, there are "Update from Internet" and "Close" buttons. A status bar at the bottom left indicates "123 Records Found".

Status	MSDS ID	Product Name	Manufacturer	Type	Last Modified	Location
Verify	MSDS00606	Loctite(R) 480 Prism(R) I	LOCTITE CORP	HTML		http://v
Verify	MSDS00002	2085	ADS	PDF	Thu, 12 Apr 2001	http://v
Verify	MSDS00013	3M Import test	ADS	Text		http://r
Verify	MSDS00646	400009-317 LIQUI-JET	AMSCO INTERNATI	HTML	Fri, 25 Sep 1998 1	http://v
Verify	MSDS00656	ACETONE ALCOHOL PF	CLINIPAD CORP	HTML		http://v
Verify	MSDS00858	Acid Fuchsin	MALLINKRODT-BAK	HTML		http://v
Verify	MSDS00875	Ammonia Solution Stron	MALLINKRODT-BAK	HTML		http://v
Verify	MSDS00966	Ampicillin	EM DIAGNOSTIC S	HTML		http://v
Verify	MSDS00869	Aniline	MALLINKRODT-BAK	HTML		http://v
Verify	MSDS00860	Aniline blue	MALLINKRODT-BAK	HTML		http://v
Verify	MSDS00903	Assist	DIVERSEY CORP	HTML		http://v
Verify	MSDS00855	Attest Rapid Readout	3M	HTML		http://r
Verify	MSDS00663	BACITRACIN	FOUGERA E & CO D	HTML	Tue, 05 Jan 1999	http://s

Labels and callouts in the image:

- Status column (points to the Status column header)
- Search the MSDSpro database (points to the Search button)
- Remove a product record from the list of MSDSs to be updated (points to the Remove button)
- Print the list of MSDSs to be updated (points to the Print View button)
- Click here to update MSDSs from the Internet (points to the Update from Internet button)

Update MSDS From Internet (Cont'd)

To update MSDS documents from the Internet:

1. **Click on the ADMIN button on the floating toolbar.**
2. **Click on the *Updates* tab.**
3. **Click Update MSDS from Internet and then click on the SELECT button.**

The *Update MSDS from Internet Output form* appears displaying all the MSDS documents imported from the Internet, their last modified date and the URL from which they were imported.

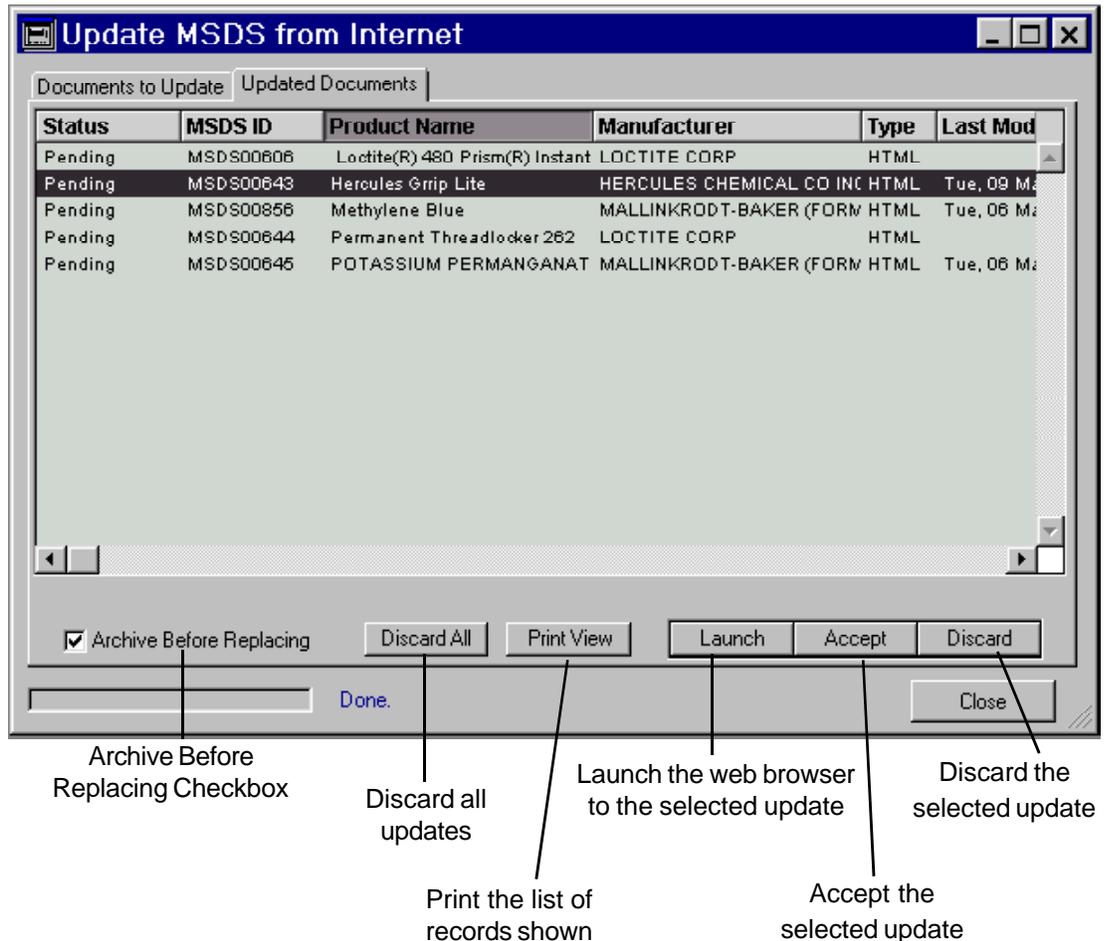
5. **Click the UPDATE FROM INTERNET button to begin the update process .**
6. **Click OK in the Confirm dialog to continue the update process.**

Prior to updating, the Status column displays the word "Verify". After the update process has completed, the Status column will display one of several other entries. They are:

- **Not Modified - The MSDS has not been modified since the last time it was updated.**
- **Not Found - The MSDS no longer exists at the original URL.**
- **Pending - An updated MSDS has been imported into the system. Before the new MSDS will replace the old one the user needs to click on the ACCEPT button under the Updated Documents tab.**
- **Unavailable - The original URL is valid however the server hosting the MSDS on the Internet is not responding.**

Update MSDS From Internet (Cont'd)

MSDSs for which updates have been found will be listed under the **Updated Documents** tab.



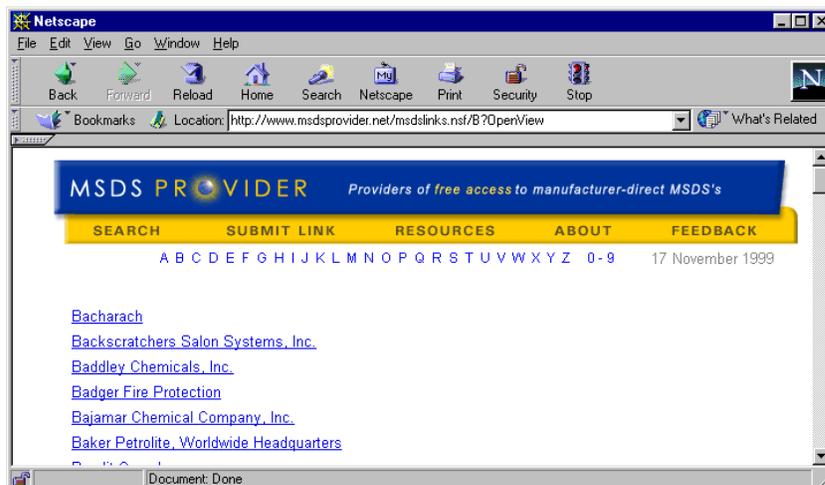
- Before the new MSDS will be attached to the Product Record, the **ACCEPT** button must be clicked.
- When an MSDS is updated, the old MSDS is archived by default. Unchecking the Archive Before Replacing checkbox will prevent the old MSDS from being archived.
- To prevent any one of the listed product records from being updated, highlight the record and click the **DISCARD** button.
- If no updates are desired, click the **DISCARD ALL** button.
- To view the URL from which the update has been imported, highlight the product record and click the **LAUNCH** button.
- Once all the MSDSs desired have been updated, click the **CLOSE** button to complete the process.

Launch Web Browser to MSDS Links

Selecting *Launch Web Browser to MSDS Links* from the *Admin Control Panel* will launch the default web browser to a comprehensive Internet resource (www.MSDSprovider.net) which provides free links to Manufacturer MSDS information.

To Launch your Web Browser to MSDS Links:

1. **Select *Launch Web Browser to MSDS Links* from *Admin Control Panel Updates* area.**



Note: Indepth information pertaining to **PROVIDER** can be found in at section 9-30.

Update MSDSpro CD Index

Updating the MSDSpro CD Index occurs automatically when inserting the new MSDSpro CD for the first time. However, it may be required to manually initiate the process after database rebuild. To manually initiate the update, select *Update MSDSpro CD Index* in the *Admin Control Panel*. A window will be presented to select options for the update.

Warning: The Update MSDSpro CD Index process can take a significant amount of time, and cannot be interrupted.



Update MSDSpro CD Index

To update the MSDSpro CD Index:

1. **Select *Update MSDSpro CD Index* from the *Admin Control Panel Updates* area.**
2. **If all update files are correctly found, the **NEXT >>** button will be available.**

If all update files are not correctly found, the **NEXT >>** button will not be available. The screen will show which files were not found correctly. They are normally installed by the MSDSpro Updater in a folder called "*Updates\Index*" within the *MSDSpro Program* folder.

3. **Click the **NEXT >>** button.**

The process of updating the internal data with the latest information contained on the current CD will begin, and a progress thermometer will be shown. Allow it to complete.

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Reports

Reports Control Panel

The *Reports Control Panel* allows Admin users to use various reports from the data in MSDSpro.

The *Reports Control Panel* is divided into four sections: Product and Inventory, Chemical, Regulatory, and Ad Hoc.

- **Product and Inventory reports include standard reports that Admin Users may regularly access.**

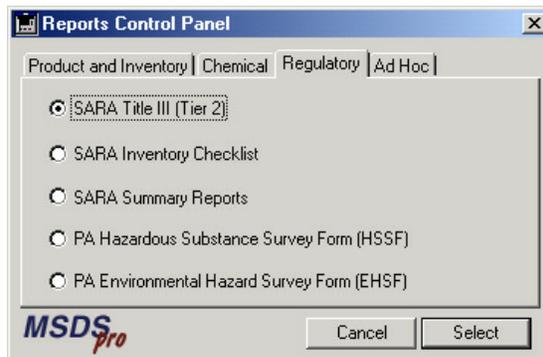


- **Chemical reports include standard reports that show what Chemicals are in use at specific Locations.**



Reports Control Panel (Cont'd)

- **Regulatory** reports include standard reports that Admin Users may access to produce reports for Regulatory Agencies, such as SARA reports for the local and state emergency planning authorities.



- **Ad Hoc** reports provides access to produce reports and container labeling for custom needs.



MSDS/Hazards by Location

MSDS/Hazards by Location is available from the *Reports Control Panel*. This allows for the batch printing of multiple MSDS documents or associated Hazard Summaries, by any Location entered in MSDSpro, with or without an index sheet. This feature is commonly used to print entire MSDS binders with index sheets. Only MSDS documents which are available will be included in this report.

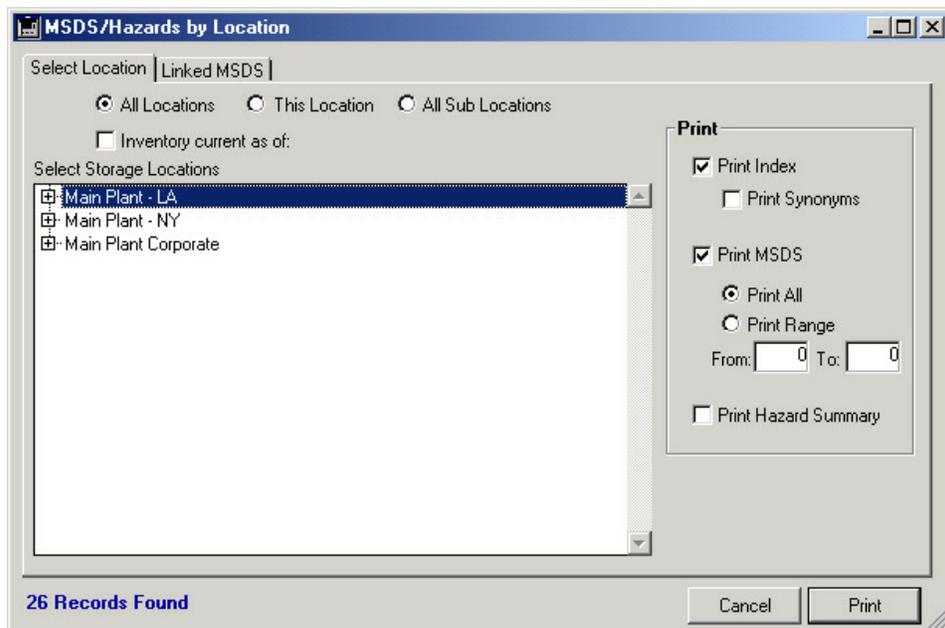
To print *MSDS/Hazards by Location*:

1. Choose *MSDS/Hazards by Location* from the *Reports Control Panel*, and click **SELECT**.

The Storage Locations scrolling area will list all Locations within the MSDSpro database.

2. Select the Location to search.

The Product records associated with the Location are found and the number found is shown.



3. Select items to print (Index, Synonyms, MSDS, and Hazard Summary).

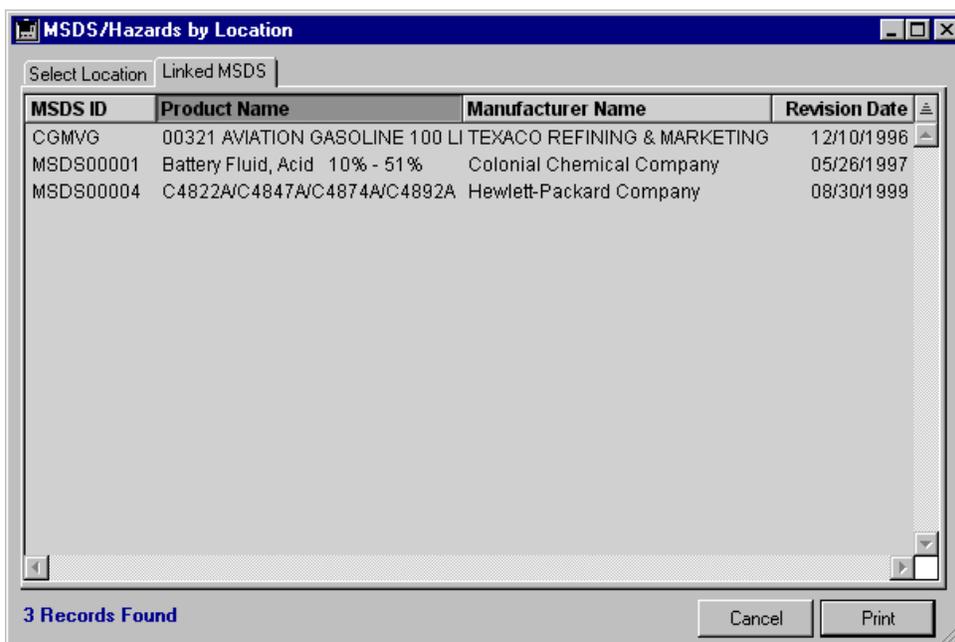
Any combination of items may be printed at one time. If Synonyms is selected, an alternate index will be printed that contains all the Synonyms associated with each Product, in addition to the normal index listing the Product name.

4. If desired, check the **Inventory current as of date** to indicate that only those records active specific to a certain date should be printed.

MSDS/Hazards by Location (Cont'd)

4. Click the *Linked MSDS tab* to preview the MSDS documents that were found for the selected Location(s).

Click **PRINT** to print the Index, Synonyms, MSDS documents, or Hazard Summaries, as determined on the *Select Location tab*.



The screenshot shows a software window titled "MSDS/Hazards by Location". It has two tabs: "Select Location" and "Linked MSDS". The "Linked MSDS" tab is active, displaying a table with the following data:

MSDS ID	Product Name	Manufacturer Name	Revision Date
CGMVG	00321 AVIATION GASOLINE 100 LI	TEXACO REFINING & MARKETING	12/10/1996
MSDS00001	Battery Fluid, Acid 10% - 51%	Colonial Chemical Company	05/26/1997
MSDS00004	C4822A/C4847A/C4874A/C4892A	Hewlett-Packard Company	08/30/1999

At the bottom of the window, it indicates "3 Records Found" and has "Cancel" and "Print" buttons.

Inventory by Location

Inventory by Location is available from the *Reports Control Panel*. This allows printing of all Inventory and Chemical records for Products at specific Storage Locations.

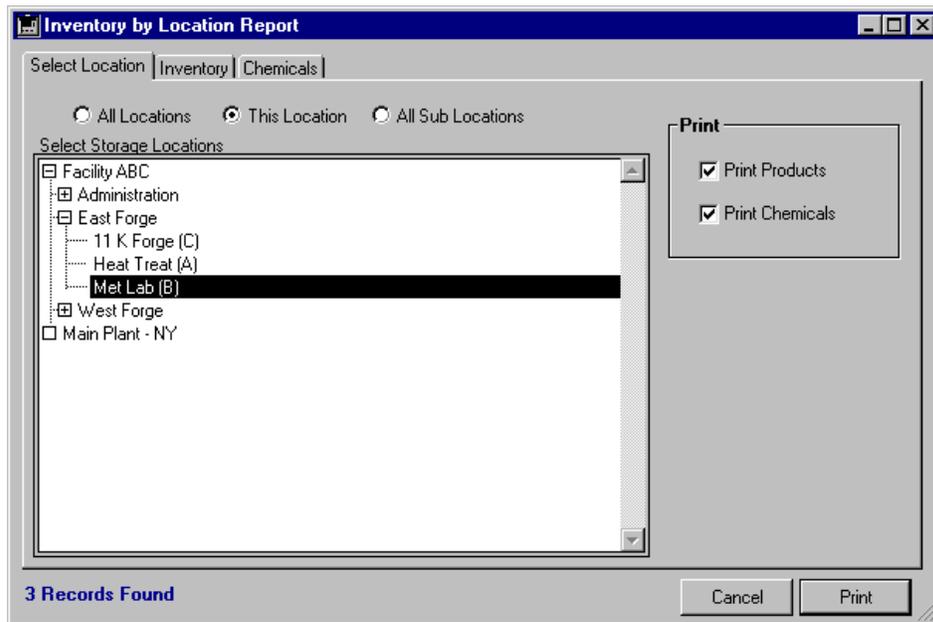
To create an *Inventory by Location* report:

1. **Choose *Inventory by Location* from the *Reports Control Panel*, and click **SELECT**.**

The Storage Locations scrolling area will list all Locations within the MSDSpro database.

2. **Select the Location to search.**

The Product records associated with the Location are found and the number found is shown.



3. **Select items to print (Products and/or Chemicals).**

Either Products or Chemicals may be printed at one time.

Inventory by Location (Cont'd)

- Click the *Inventory* tab to preview the Inventory records that were found for the selected Location(s).

Product Name	Start Date	Container Size	Container Unit	Average
00321 AVIATION GASOLINE 100 LL	01/01/1998	7	US Gallons	
Battery Fluid, Acid 10% - 51%	01/01/1998	7	US Quarts	
C4822A/C4847A/C4874A/C4892A	01/01/1998	7	US Gallons	

3 Records Found

- Click the *Chemicals* tab to preview the associated Chemical records that were found at the selected Location(s).

Click **PRINT** to print the Inventory records.

Product Name	Chemical Name	CAS Number	Weight %
C4822A/C4847A/C4874A/C4892A		TRADE SECRET	BALANCE %
C4822A/C4847A/C4874A/C4892A		NOT SPECIFIED	<0.5%
C4822A/C4847A/C4874A/C4892A	WATER	7732-18-5	>60%
C4822A/C4847A/C4874A/C4892A	2-pyrrolidone	616-45-5	<10%
00321 AVIATION GASOLINE 100 LL	ETHYL BENZENE *96-2*	100-41-4	100% - 100%
Battery Fluid, Acid 10% - 51%	Sulfuric Acid	7664-9-39	10% - 51%

3 Records Found

Product Summary

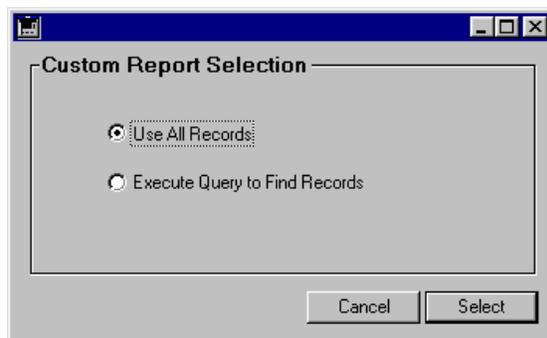
Product Summaries are summarized versions of the Product information for a particular MSDS. The *Product Summary* will include information about the Product, Manufacturer, NFPA or HMIS hazard rating, hazardous ingredients, and associated Phrases.

To create *Product Summaries* for a selection of Products:

1. Choose **Product Summary** from the **Reports Control Panel**, and click **SELECT**.
2. Choose **Use All Records**, or to **Execute Query to Find Records**, and click **SELECT**.

For detailed information describing how to use the *Query editor*, see *The Query Editor* in *Database Conventions*.

After finding Product records, the *Product Summaries* will be printed.

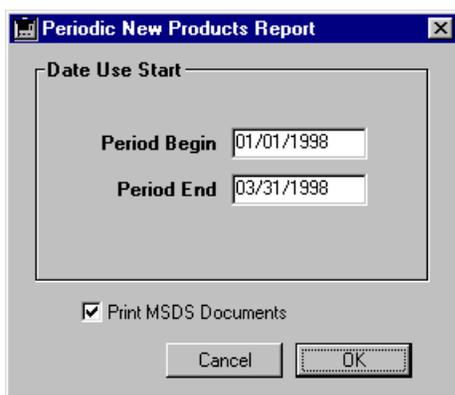


Periodic New Products

MSDSpro allows the DBA to find Products which have been added during a specific time period. For instance, it may be necessary to know which Product records have been added during the first 3 months of the current year for Emergency Response planning.

To create a *Periodic New Products* report:

1. Choose *Periodic New Products* from the *Reports Control Panel*, and click **SELECT**.
2. Enter the *Period Begin* date and the *Period End* date.



The screenshot shows a dialog box titled "Periodic New Products Report". It contains a section labeled "Date Use Start" with two input fields: "Period Begin" (01/01/1998) and "Period End" (03/31/1998). Below the input fields is a checked checkbox for "Print MSDS Documents". At the bottom of the dialog are "Cancel" and "OK" buttons.

3. Choose to *Print MSDS Documents* if it is necessary to also have all documents in addition to the listing of the Product Names, Manufacturer Names, and Revision Dates.
4. Click **OK** to print.

Container by Location

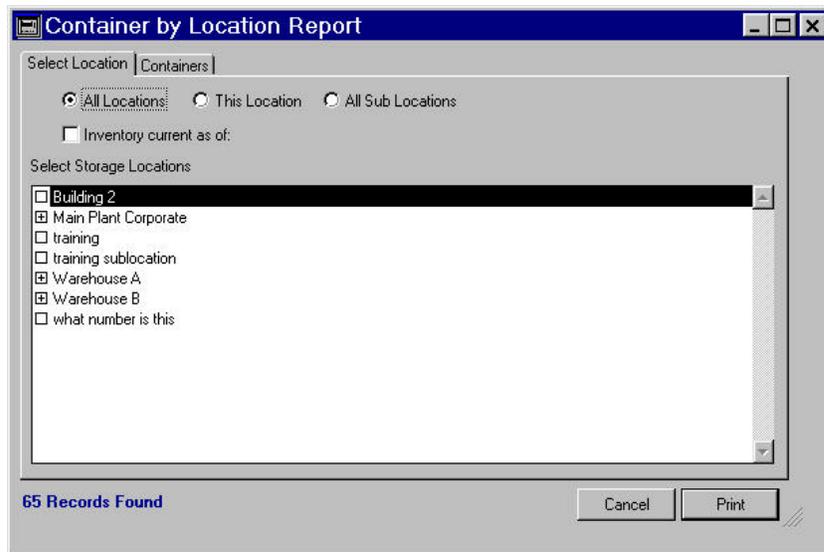
Container by Location is available from the *Reports Control Panel*. This report creates a list of all Containers and their associated Products stored at a Location.

To create a *Container by Location* report:

1. Choose ***Container by Location*** from the *Reports Control Panel*, and click on the **SELECT** button.

The Storage Locations scrolling area will list all Locations within the MSDSpro database.

2. Select the Location to search.
 - Choose **All Locations** to run the report on all locations.
 - Choose **This Location** to run the report on only the highlighted location.
 - Choose **All Sub Locations** to run the report at the highlighted location and all its child (sub) locations.



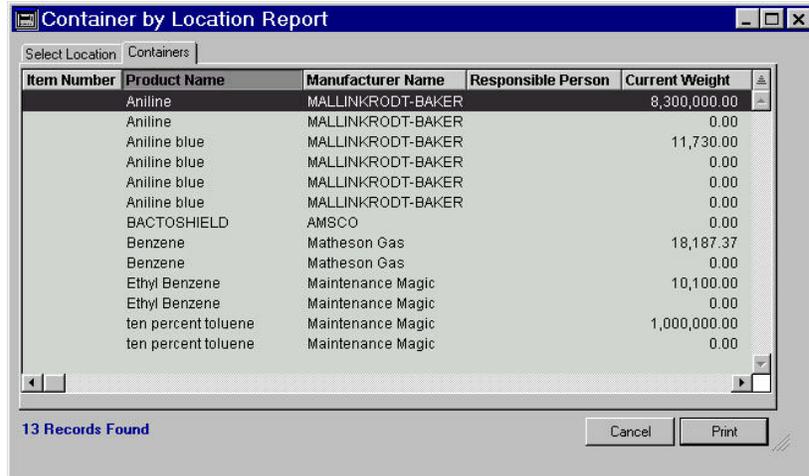
The Container records associated with the selected Location(s) and the number found is shown.

3. Check the ***Inventory current as of:*** checkbox to print only container records present on a specific date.

Leaving Inventory current as of checkbox blank will print all container records regardless of the start and end dates.

Container by Location (Cont'd)

4. Click the Containers tab to preview the Container records that were found for the selected Location(s).



The screenshot shows a software window titled "Container by Location Report". At the top, there is a "Select Location" dropdown menu with "Containers" selected. Below this is a table with the following columns: "Item Number", "Product Name", "Manufacturer Name", "Responsible Person", and "Current Weight". The table contains 13 rows of data. At the bottom of the window, it says "13 Records Found" and has "Cancel" and "Print" buttons.

Item Number	Product Name	Manufacturer Name	Responsible Person	Current Weight
	Aniline	MALLINKRODT-BAKER		8,300,000.00
	Aniline	MALLINKRODT-BAKER		0.00
	Aniline blue	MALLINKRODT-BAKER		11,730.00
	Aniline blue	MALLINKRODT-BAKER		0.00
	Aniline blue	MALLINKRODT-BAKER		0.00
	Aniline blue	MALLINKRODT-BAKER		0.00
	BACTOSHIELD	AMSCO		0.00
	Benzene	Matheson Gas		18,187.37
	Benzene	Matheson Gas		0.00
	Ethyl Benzene	Maintenance Magic		10,100.00
	Ethyl Benzene	Maintenance Magic		0.00
	ten percent toluene	Maintenance Magic		1,000,000.00
	ten percent toluene	Maintenance Magic		0.00

5. Click on the PRINT button to print the Inventory records.

Inventory Past End Date

To determine which product records have passed their end date at a specific Location, choose *Inventory Past End Date* from the *Reports Control Panel*.

To create an *Inventory Past End Date Report*:

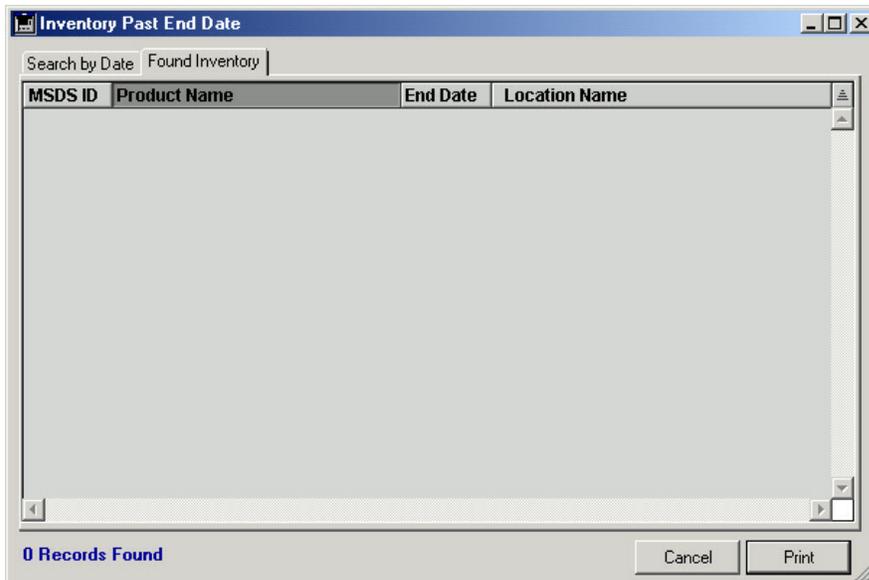
1. Choose *Inventory Past End Date* from the *Reports Control Panel*, and click **SELECT**.
2. Either select the **Number of Months**, or enter the **Start Date**.

Product records that have a revision date earlier than the start date entered or the number of months entered will be included in the report

The screenshot shows a window titled "Inventory Past End Date" with a search bar containing "Search by Date" and "Found Inventory". The main area is titled "Report Inventory Past End Date" and contains two radio button options: "Number of Months" (selected) and "Date". Under "Number of Months", there are two input fields: "Months:" with a dropdown menu showing "0" and "Other:" with a text box showing "0". Under "Date", there is an "End Date" text box showing "00/00/00". At the bottom right, there are "Cancel" and "Print" buttons.

Inventory Past End Date (Cont'd)

3. Click the *Found Inventory* to review the search results.
4. Click on the **PRINT** button to print the report.



Manufacturer Request

MSDSpro allows an administrator to send an e-mail or printed request for updated MSDSs to one or more manufacturers simultaneously. This function is known as a *Manufacturer Request* and it simplifies the process of obtaining new MSDS documents from product manufacturers.

To create a *Manufacturer Request*:

1. Choose *Manufacturer Request* from the *Reports Control Panel*, and click on the **SELECT** button.
2. The *Manufacturer Update Request Entry form* loads.

- If desired, enter a date into the **Limit by Revision Date** field.

Only MSDSs containing a Revision Date older than the entry into this field will be requested from the manufacturer.

- Check the **Include products with updated documents** checkbox if product records that have already been updated using the **Update MSDS from Internet** function are to be included in this request.
- The **Date** field shows the current date.

3. Click on the **SELECT** button to select to which manufacturers a request is to be sent.

Clicking on the **SELECT** button loads the *Select Company form*.

Manufacturer Request (Cont'd)

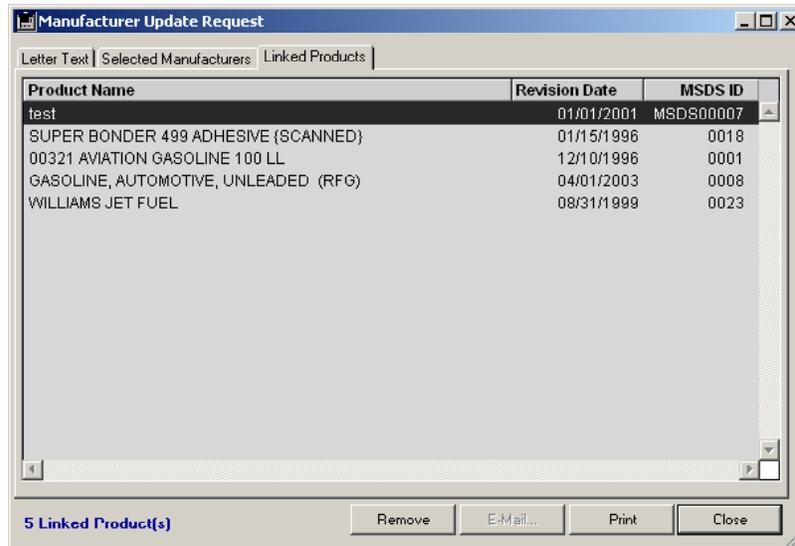
4. Click on the name of each manufacturer to be included in the Manufacturer Request.
Drag the mouse cursor over multiple manufacturers to select all of them.



- Click on the **NEW** button to create a new manufacturer record.
 - Click on the **SEARCH** button to search for manufacturers meeting a specific criteria.
 - Click on the **SELECT ALL** button to select all manufacturers.
 - Click on the **CLEAR ALL** button to deselect all currently selected manufacturers.
 - Click on the **VIEW** button to view the highlighted manufacturer record.
 - Click on the **CANCEL** button to close the *Select Company form*.
5. Click on the **OK** button to continue creating the Manufacturer Request.

Manufacturer Request (Cont'd)

6. Click on the *Linked Products* tab to view the products to be requested from the manufacturer(s).



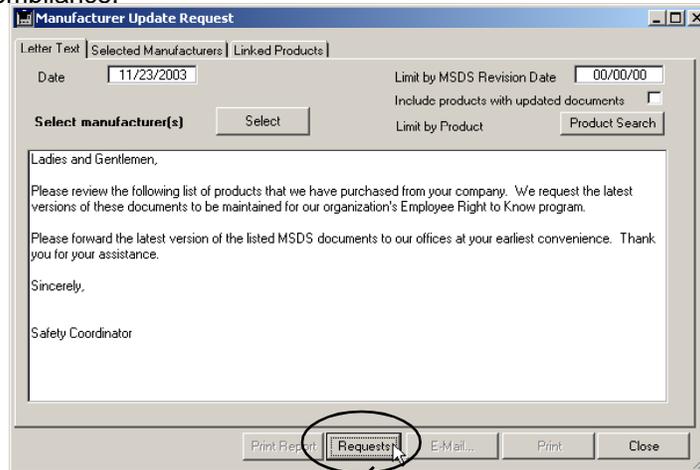
7. Click on the REMOVE button to remove any highlighted products not to be included in the request(s).
8. Click on the E-MAIL or PRINT button to either e-mail the request(s) to the Manufacturer(s) or print out the request(s) for regular mailing.
9. Once the request has been either e-mailed or printed, click on the CLOSE button to close the *Manufacturer Update Request Entry form*.

Manufacturer Request (Cont'd)

Tracking Requests to manufacturers

MSDSpro also has the ability to track those MSDS's that have previously been requested. This provides providing an electronic record for your compliance.

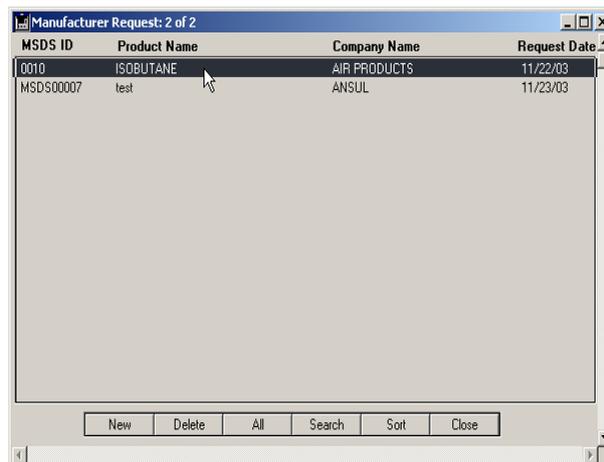
To view reports, click the Request button.



This will open the SELECT RECORDS dialog.



Choose the product you wish to review.



Manufacturer Request (Cont'd)

Tracking Requests to manufacturers (Cont'd)

MSDS ID: 0010 MSDS_Received

Product Name: ISOBUTANE

Manufacturer Name: AIR PRODUCTS

Request Date: 11/22/03

Notes: Received Updated MSDS from manufacture today

Buttons: Delete, Cancel, Save

- Notes can be added to track specific details pertaining to each MSDS.
- When the MSDS arrives from the Manufacture check the MSDS_Received button.

E-mailing a Manufacturer Request

Clicking on the **EMAIL** button on the *Manufacturer Update Request Entry form* loads the *Send E-Mail Message Entry form*.

Send E-Mail Message

Your E-Mail:

Your Name:

Recipient E-Mail:

Subject:

Message

Ladies and Gentlemen,

Please review the following list of products that we have purchased from your company. We request the latest versions of these documents to be maintained for our organization's Employee Right to Know program.

Please forward the latest version of the listed MSDS documents to our offices at your earliest convenience. Thank you for your assistance.

Send copy to my E-Mail address

To email a manufacturer request:

1. Enter into the **Recipient E-mail** field the email addresses of the manufacturers to which this request is to be sent.
2. Enter into the **Your E-Mail** and **Your Name** fields the contact information of the MSDSpro administrator.
3. Modify the **Subject** and **Message** fields as desired.
4. Check the **Send copy to my E-Mail address** checkbox to send a copy of the request to the MSDSpro administrator listed in the form.
5. Click on the **SEND** button to send the request or the **CLOSE** button to close the *Send E-Mail Message Entry form*.

MSDS Aging Report

To determine which MSDS documents are older than a certain number of months, or have revision dates before a certain date, choose *MSDS Aging Report* from the *Reports Control Panel*.

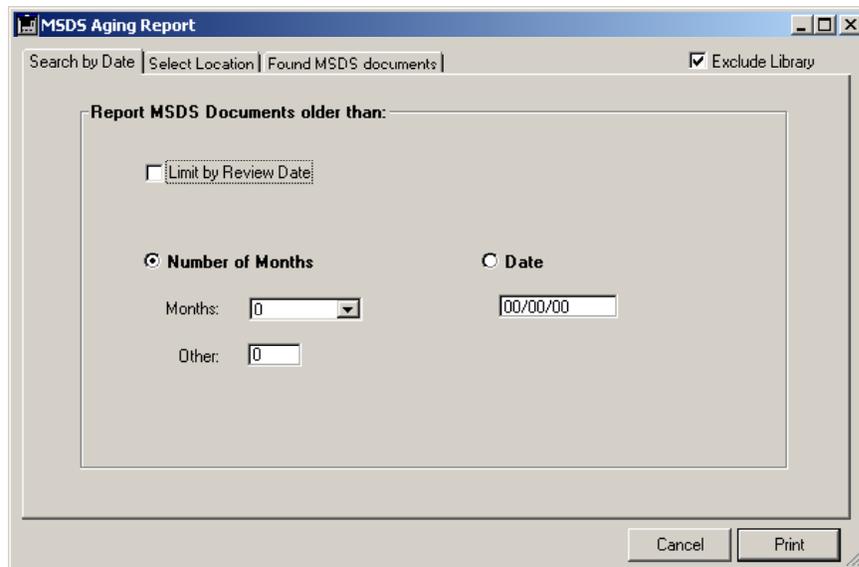
To create an *MSDS Aging Report*:

1. Choose *MSDS Aging Report* from the *Reports Control Panel*, and click **SELECT**.
2. Either select the **Number of Months**, or enter the **Start Date**.

Product records that have a revision date earlier than the start date entered or the number of months entered will be included in the report

3. Check the **Limit by Review Date** checkbox to further limit search results by the **Review Date** field in the **Product Record**.

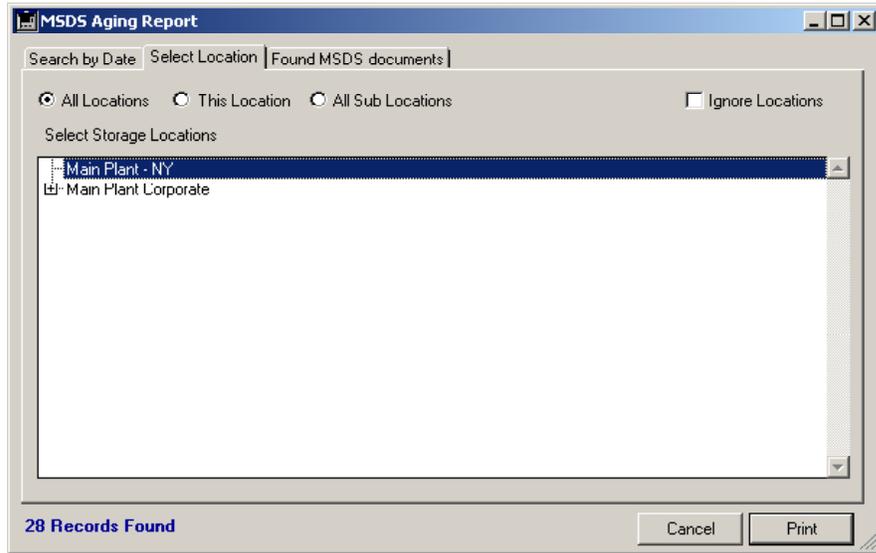
Use this checkbox if only MSDSs that have not been reviewed in a certain amount of time are to be included in the MSDS Aging report.



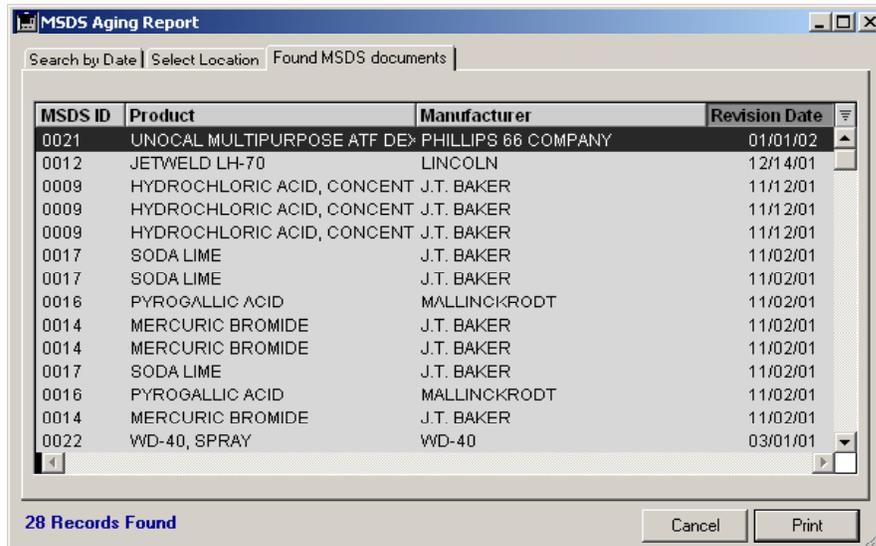
The screenshot shows a dialog box titled "MSDS Aging Report". At the top, there are three tabs: "Search by Date", "Select Location", and "Found MSDS documents". A checkbox labeled "Exclude Library" is checked. The main area is titled "Report MSDS Documents older than:" and contains a checkbox for "Limit by Review Date" which is unchecked. Below this, there are two radio buttons: "Number of Months" (selected) and "Date". Under "Number of Months", there is a "Months:" label with a dropdown menu showing "0" and an "Other:" label with a text input field showing "0". Under "Date", there is a text input field showing "00/00/00". At the bottom right, there are "Cancel" and "Print" buttons.

MSDS Aging Report (Cont'd)

3. Click the **Select Location** tab to choose the location, or locations to query.



4. Click the **Found MSDS Documents** tab to review the documents found.
5. Click on the **PRINT** button to print the report.



Products without MSDS

MSDSpro allows Product records to be added to the system at any time, without requiring that an MSDS document be added. This facilitates the addition of MSDS and related data at any time, and increases convenience for the users.

Occasionally it is necessary to determine which Product records have no associated Document records. The *Products without MSDS* report is available from the *Reports Control Panel*. It will search the database for Product Records that have no associated MSDS Document record and create a report containing the records found.

To create a *Products without MSDS Report*:

1. **Choose *Products without MSDS* from the *Reports Control Panel*, and click on the **SELECT button**.**

If any Product records are found that do not have corresponding MSDS Document records, the report will be sent to the selected printer.

Products without Location

MSDSpro allows product records to be added to the MSDSpro database at any time, without requiring that the product record be added to an inventory location. MSDSpro has the ability to generate a report detailing which product records have not been added to an inventory location. The Products without Location report is available from the Reports Control Panel. It will search the database for product records that have not been added to an inventory location and create a report containing a list of the records found.

To create a Products without Location Report:

1. **Choose *Products without Location* from the *Reports Control Panel*, and click on the **SELECT** button.**

If any Product records are found that have not been added to an inventory location, the report will be sent to the selected printer.

MSDS Binder

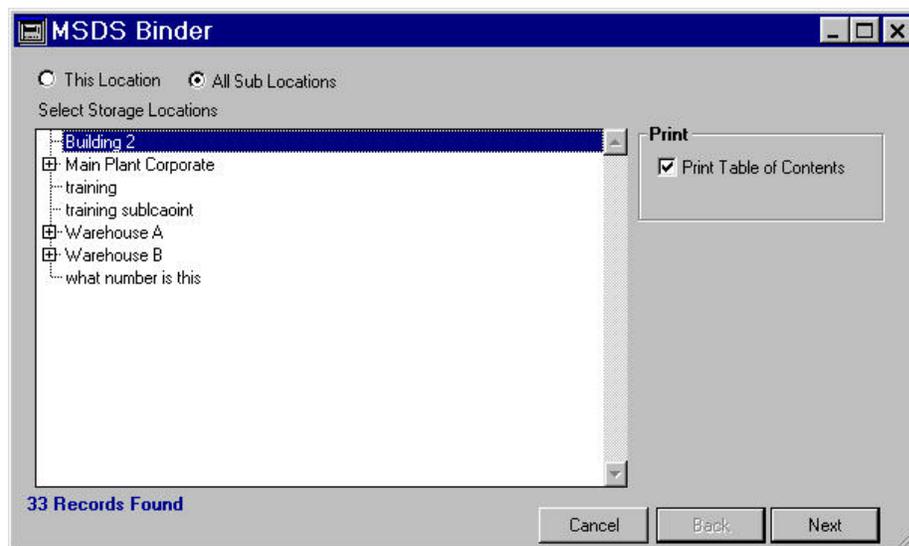
The *MSDS Binder report* allows for the creation of a single PDF document containing all the PDF, Text, and ANSI Text MSDSs for products used at either a single location or at all the sublocations of a single location. MSDSs in Image or HTML format will not be included in the document. However, HTML documents can be converted to PDF and stored in addition to the HTML version for binder printing. To access the *MSDS Binder report*, click on the MSDS Binder radio button under the *Products and Inventory tab* on the *Reports Control Panel*.

To create an *MSDS Binder report*:

1. Choose **MSDS Binder** from the **Reports Control Panel** and click on the **SELECT** button.
2. Highlight the location for which the MSDS Binder will be created.
3. Select either **This Location** or **All Sublocations**.

Choosing This Location will create a binder of the MSDSs at the highlighted location. Choosing All Sublocations will create a binder of the MSDSs at all sublocations of the highlighted location. MSDSs at the highlighted location will be included.

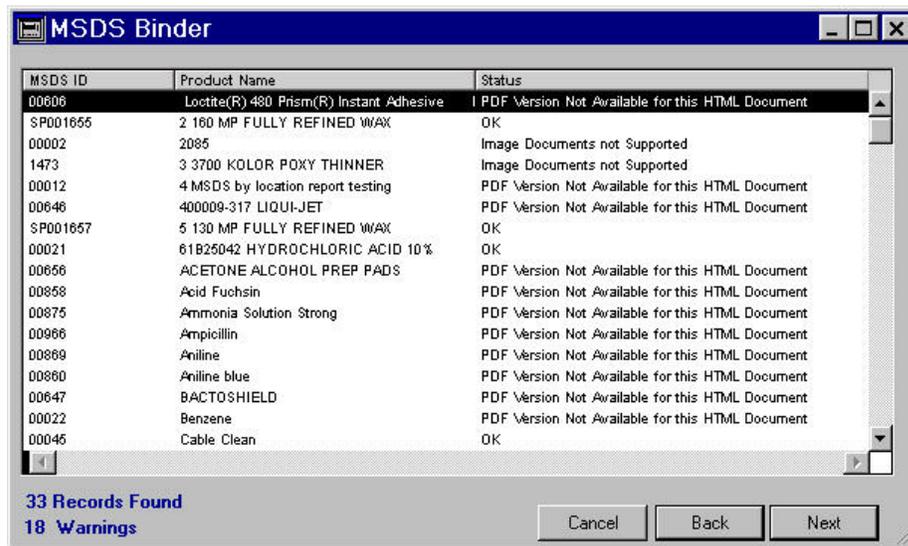
4. Check the **Print Table of Contents** checkbox to include a table of contents.
5. Click on the **NEXT** button.



MSDS Binder (Cont'd)

6. Review any warnings displayed in the Status column.

Product records that have MSDSs in HTML or Image format will have warnings listed in the Status column. Decide whether to convert those MSDSs to PDFs or leave them out of the MSDS binder. These documents will be included in the index so they can be easily printed and inserted later.



MSDS ID	Product Name	Status
00606	Loctite(R) 480 Prism(R) Instant Adhesive	PDF Version Not Available for this HTML Document
SP001655	2 160 MP FULLY REFINED WAX	OK
00002	2085	Image Documents not Supported
1473	3 3700 KOLOR POXY THINNER	Image Documents not Supported
00012	4 MSDS by location report testing	PDF Version Not Available for this HTML Document
00646	400009-317 LIQUI-JET	PDF Version Not Available for this HTML Document
SP001657	5 130 MP FULLY REFINED WAX	OK
00021	61B25042 HYDROCHLORIC ACID 10%	OK
00656	ACETONE ALCOHOL PREP PADS	PDF Version Not Available for this HTML Document
00858	Acid Fuchsin	PDF Version Not Available for this HTML Document
00875	Ammonia Solution Strong	PDF Version Not Available for this HTML Document
00966	Ampicillin	PDF Version Not Available for this HTML Document
00869	Aniline	PDF Version Not Available for this HTML Document
00860	Aniline blue	PDF Version Not Available for this HTML Document
00647	BACTOSHIELD	PDF Version Not Available for this HTML Document
00022	Benzene	PDF Version Not Available for this HTML Document
00045	Cable Clean	OK

33 Records Found
18 Warnings

Cancel Back Next

7. Click on the NEXT button.

MSDS Binder (Cont'd)

8. Edit the Location Name, Current Date or Table of Contents title if desired.
9. Add additional text in these fields if desired.

Location Name

Current Date

Table of Contents

MSDS Binder

Table of Contents Format

Building 2

11/22/02

TABLE OF CONTENTS

MSDS ID Product Name Document Number

Manufacturer

Revision Date

33 Records Found

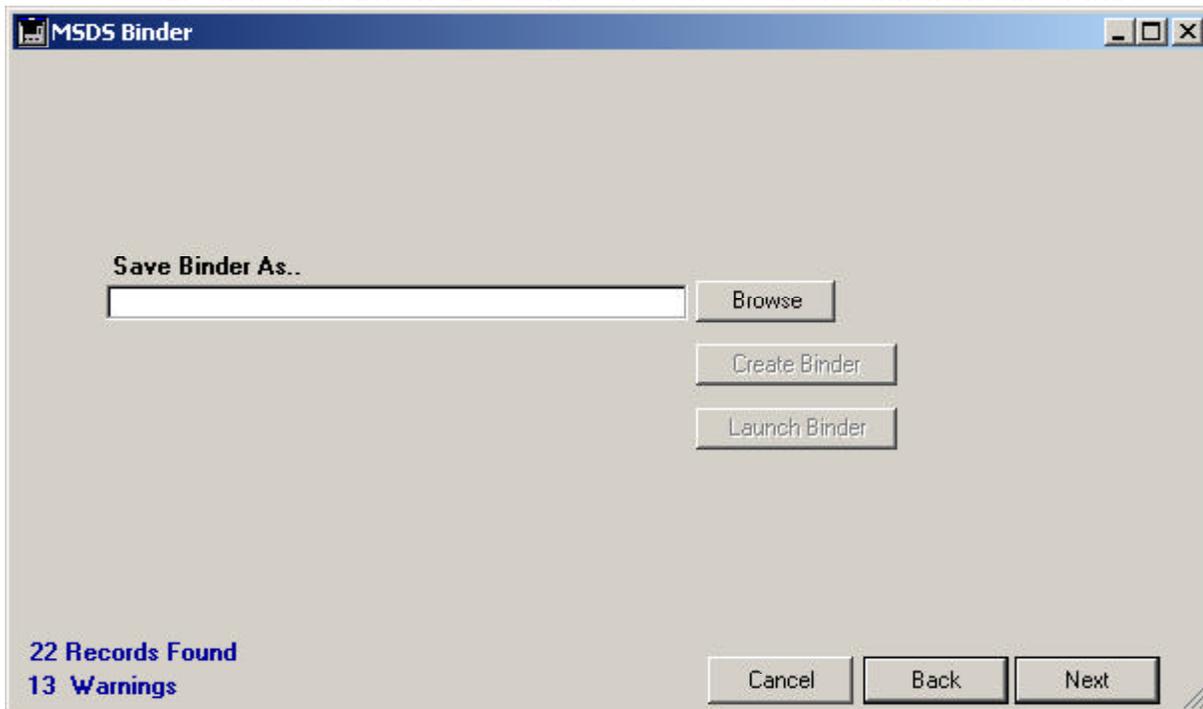
18 Warnings

Cancel Back Next

10. Uncheck the MSDS ID, Document Number, Manufacturer or Revision Date fields if any of these fields are not to be included in the binder.
11. Click on the NEXT button.

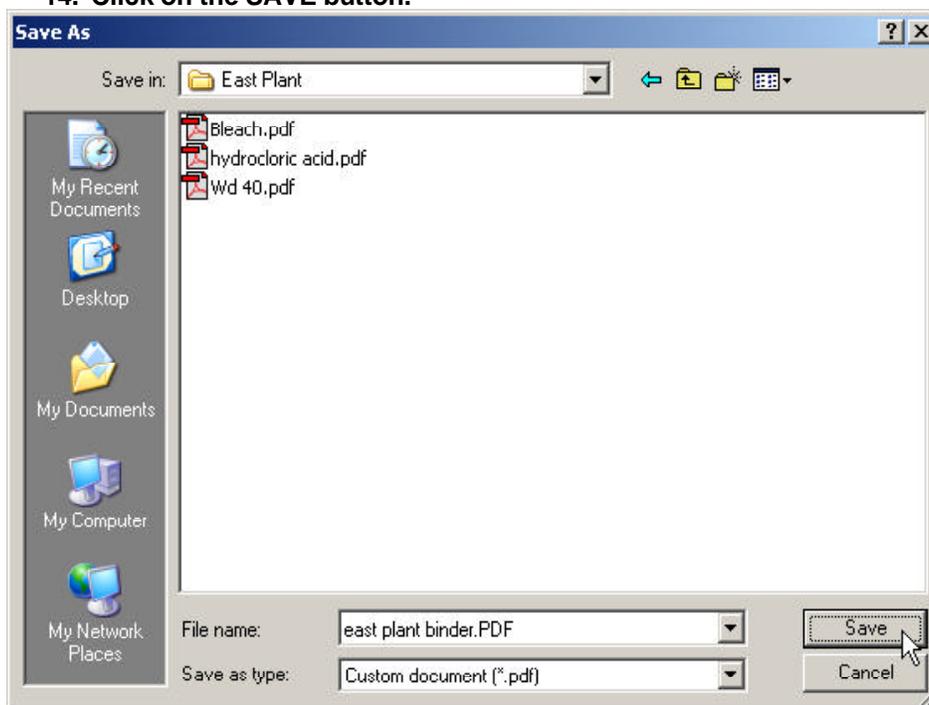
MSDS Binder (Cont'd)

12. Click on the BROWSE button to select the location to which the binder will be saved.



13. Enter the desired name for the new binder in the File Name field.

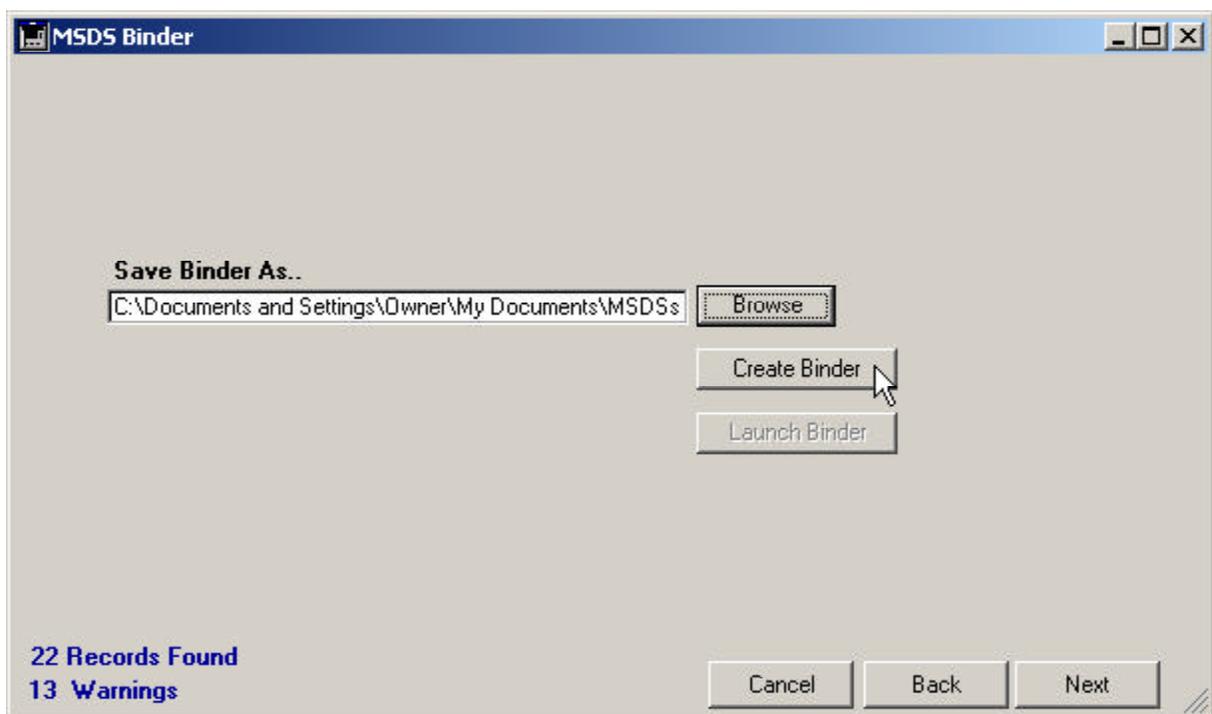
14. Click on the SAVE button.



MSDS Binder (Cont'd)

15. Click on the CREATE BINDER button

MSDSpro will now create the new binder in the directory specified.



16. Click on the NEXT button to begin creating another binder or click on the CANCEL button to exit the MSDS Binder report.

Chemical Location

The *Chemical Location* report is available from the *Reports Control Panel*. This allows printing of all Chemical listings which are stored at specific Storage Locations, sorted by the Product it comprises.

To create a *Chemical Location* report:

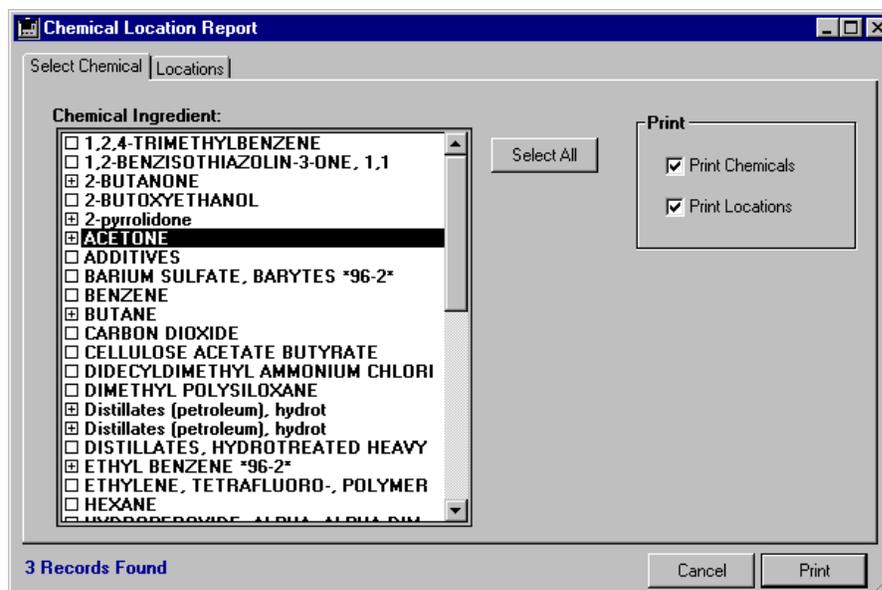
1. Choose **Chemical Location** from the *Reports Control Panel*, and click on the **SELECT** button.

The Chemical Ingredient scrolling area will display all Chemicals within the database. The first Chemical is selected by default.

2. Select the Chemical(s) to report.

The number of Locations in which the Chemical is stored will be displayed under the list of Chemicals. If a plus sign (+) is shown to the left of a Chemical, clicking it will show the Product names that use the Chemical as an Ingredient.

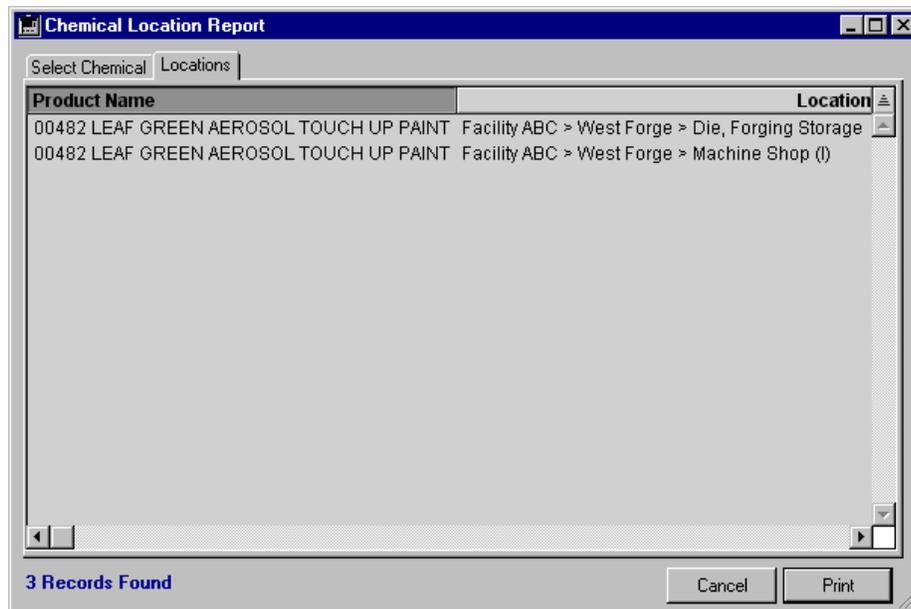
3. Choose whether to Print Chemicals with or without Locations by clicking the checkboxes.



Chemical Location (Cont'd)

4. Click the *Locations* tab to preview the Products and Locations which contain the selected Chemical(s).

The number of Locations in which the Chemical is stored will be displayed under the list of Chemicals.



5. Click PRINT to print the report.

Chemical Hazards

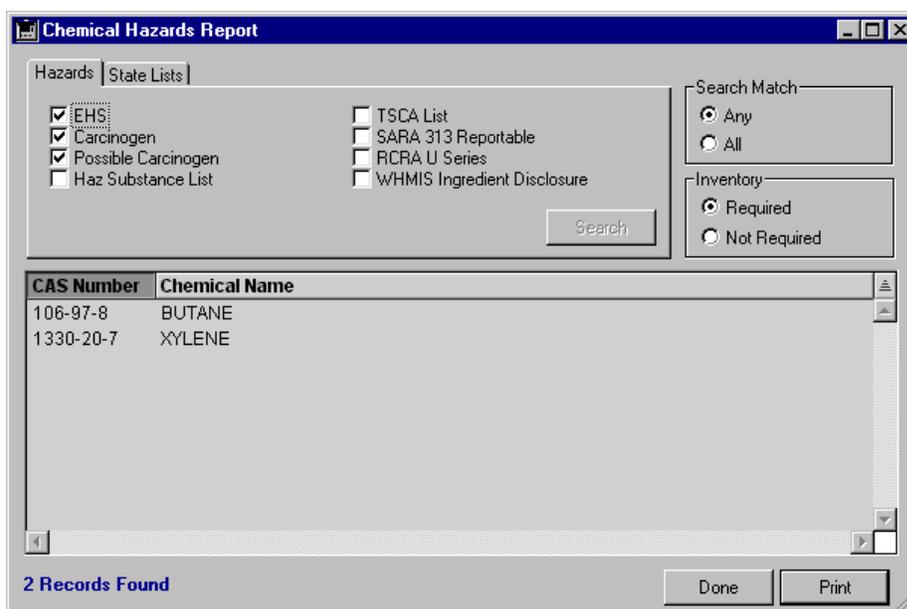
The *Chemical Hazards* report allows interactive searching of Chemicals by their associated hazards (as entered with Federal and State regulatory flags.) After a specific Chemical is found by the associated hazards, the *Chemical Location* report may be used to locate the actual Location of the Products which contain the Chemical.

To create a *Chemical Hazards* report:

1. Choose **Chemical Hazards** from the **Reports Control Panel**, and click on the **SELECT** button.

The *Chemical Hazards Report* window appears.

2. Select the Hazards required from the **Hazards tab** and **State Lists tab**.
3. Select **Search Match**, requiring that *Any* selected Hazards are sufficient, or if *All* of the Hazards will be required for each Chemical during this search.
4. Select **Inventory**, to *Require* Inventory records to exist, or if Inventory records are *Not Required* to exist for each Chemical during this search.
5. Click on the **SEARCH** button.



The screenshot shows the 'Chemical Hazards Report' window. It has two tabs: 'Hazards' and 'State Lists'. Under 'Hazards', there are two columns of checkboxes. The first column has 'EHS', 'Carcinogen', 'Possible Carcinogen', and 'Haz Substance List', all of which are checked. The second column has 'TSCA List', 'SARA 313 Reportable', 'RCRA U Series', and 'WHMIS Ingredient Disclosure', all of which are unchecked. To the right of these checkboxes is a 'Search' button. Further right are two radio button groups. The first is 'Search Match' with 'Any' selected and 'All' unselected. The second is 'Inventory' with 'Required' selected and 'Not Required' unselected. Below these controls is a table with two columns: 'CAS Number' and 'Chemical Name'. The table contains two rows: '106-97-8 BUTANE' and '1330-20-7 XYLENE'. At the bottom left of the window, it says '2 Records Found'. At the bottom right, there are 'Done' and 'Print' buttons.

CAS Number	Chemical Name
106-97-8	BUTANE
1330-20-7	XYLENE

SARA Title III (Tier 2)

MSDSpro generates the annual *SARA Title III (Tier 2)* report based on Product (or Chemical) quantities stored at a location. Product quantities can be either manually entered into MSDSpro or calculated automatically. Manually entering product quantities into MSDSpro is covered on pp. 4-54. In order for MSDSpro to accurately calculate the *SARA Title III (Tier 2)* report, six fields must be filled out. The first four fields are found on the *Inventory Data Entry form*. The *Inventory Data Entry form* is covered on pp. 4-51 through 4-56.

- **Inventory Start Date:** The **Inventory Start Date** field lists the date that the Product was first stored at a Location.

MSDSpro automatically enters the current date into this field when a Product is first added as Inventory to a Location. If a different Inventory Start Date is desired, any MSDSpro administrator can edit this field at any time.

SARA Title III (Tier 2) (Cont'd)

The screenshot shows a software window titled "Edit Inventory record" with the following fields and values:

- Product Name: 00321 AVIATION GASOLINE 100 LL
- Storage Name: Equipment 1
- Storage Location: Main Plant - NY > Control Center 1 > Unit 1 > Equipment 1
- Physical Inventory | SARA Inventory | SARA Containers (selected)
- Select Item: NA
- Item Number: [empty]
- Responsible Person: Harper, Roy
- Start Date: 00/00/00
- Number Containers: 1
- Container Size: 50
- Container Unit: Pounds
- Expires Date: 00/00/00
- SARA Codes:
 - Container Type: B Below ground tank
 - Container Pressure: 1 Ambient pressure
 - Container Temperature: 5 > Ambient
- Container Properties:
 - Days on Site: 365
 - Current Amount: 50
 - Max Amount: 50
 - Average Amount: 50

Buttons at the bottom include Add, Delete, Cancel, and Save.

- **Number of Containers:** The Number of Containers field lists the quantity of containers that are used to store the Product.

For example, if a Product is stored at a location in ten 55-gallon drums, the Number of Containers field should contain the number ten.

- **Container Size:** The Container Size field lists the size of each container.

Using the previous example, the Container Size field should contain the number fifty-five.

- **Container Unit:** The Container Unit field lists the units of weight or volume that the inventory quantity is measured in.

Using the previous example, the Container Unit field should contain the word gallons.

SARA Title III (Tier 2) (Cont'd)

The screenshot shows the 'Product: 15 of 181' window with the following data:

Field	Value
Product Name	Aniline blue
MSDS ID	MSDS00860
Company Name	MALLINKRODT-BAKER (FORMALLY J.T. BAKER COMPANY)
Specific Gravity	0.000000
Density lbs./Gal	4.692000
Flash Point	
FP Method	
LEL	0.0000
UFL	0.0000
Pounds Per Cubic Foot	0.000000
CAS Number	28631-66-5
Pure	<input checked="" type="checkbox"/>
Mixture	<input type="checkbox"/>

Specific Gravity &
Density fields

- **Specific Gravity or Density:** The Specific Gravity and Density fields are used by MSDSpro to convert inventory quantities from a volume measurement such as gallons to a weight measurement such as pounds.

Only one of the two fields needs to be filled in for MSDSpro to calculate quantities for the SARA Tier 2 report. If both fields contain information, MSDSpro will use the Specific Gravity field. Information is entered into the Specific Gravity and Density fields on the **Characteristics tab** under the **Product tab** within the Product record.

SARA Title III (Tier 2) (Cont'd)

Product Name
Aniline blue

CAS Number Trade Secret

Min Weight %

Ingredient Name Max Weight %

Min PPM Max PPM Weight %

EHS	TLV ACGIH <input type="text"/>	SARA 313 Reportable
TSCA List	TPQ Pounds <input type="text"/>	SARA 311/312 Exempt
Haz Substance List	<input type="text"/>	SARA 313 Exempt

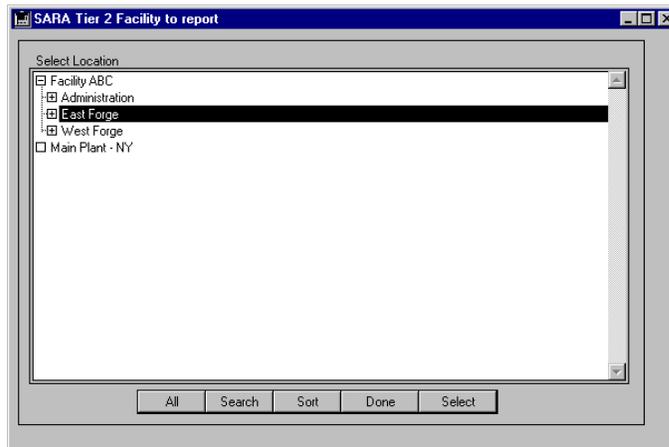
- **Maximum Weight Percent: If a Chemical is listed as an Ingredient in a Product, MSDSpro uses the information in the Maximum Weight Percent field to calculate the total amount of the Chemical in that Product.**

MSDSpro does this for every Product that contains the Chemical as an Ingredient and then sums the total amount of the Chemical in each Product to arrive at a total stored as Inventory. The Maximum Weight Percent field is located on the *Ingredient Data Entry form*. This form is covered on pp. 4-51 through 4-56.

SARA Title III (Tier 2) (Cont'd)

To create a *SARA Title III (Tier 2)* report:

1. Choose **SARA Title III (Tier 2)** from the *Reports Control Panel*, and click on the **SELECT** button.
2. Select the Location upon which to run the report.



3. Click the **SELECT** button.

Clicking on the **SELECT** button loads the *SARA Tier 2 Facility to Report Data Entry form*. Information entered in this form appears in the *SARA Title III (Tier 2)* report and can be saved by clicking on the **SAVE** button. If contact information has not yet been created for this Location, MSDSpro will prompt you to create it at this time.

4. Verify Facility and Owner Information is accurate.

SARA Title III (Tier 2) (Cont'd)

5. Verify Emergency Contact Information.

The screenshot shows a software window titled "SARA Tier 2 Facility to report" with a tabbed interface. The "Emergency Contact" tab is active. The form is divided into two main sections: "Emergency Contact 1" and "Emergency Contact 2". Each section contains four input fields: "Name", "Title", "Phone", and "24hr Phone". The "24hr Phone" field is split into two adjacent boxes. At the bottom of the window, there are "Cancel" and "Save" buttons.

6. Fill in the Name and Title information.

The screenshot shows the same software window, but with the "Attachments and Signer" tab selected. The "Optional Attachments" section has three checkboxes: "I have attached a site plan.", "I have attached a list of site coordinate abbreviations.", and "I have attached a description of dikes and other safeguard measures." Below this is the "Signer" section with "Name" and "Title" fields. The "Signer Information (Texas Only)" section includes fields for "Email", "Telephone", "Address", "City", "State", and "Zip". "Cancel" and "Save" buttons are at the bottom.

Check the appropriate checkbox if a site plan, site coordinate abbreviations or a description of other safeguard measures will be submitted with the *SARA Title III (Tier 2)* report. MSDSpro does not have the capability of creating these attachments but will indicate in the *SARA Title III (Tier 2)* report whether or not any of these optional attachments are being submitted with the report.

SARA Title III (Tier 2) (Cont'd)

7. Select the Date Range, Days Onsite, and Reporting Quantities for the report.

- **The Date Range field determines the period over which quantities will be calculated.**

This is most often the previous calendar year. Inventory that is present at any time during the date range will be calculated.

- **The Days on Site field lists the default number of days a Product has been stored at a Location.**
- **If Inventory quantities meet or exceed the amount entered in the Reporting Quantities field, the Product or Chemical will be included in the *SARA Title III (Tier 2)* report.**

8. Select whether to generate the Chemical Inclusion report and/or include non periodic products.

- **Selecting the Include Non Periodic checkbox will add to the *SARA Title III (Tier 2)* report all those Products that have been selected as non-periodic.**

A Product is selected as non-periodic only if it is not permanently stored at a Location. A Product is flagged as non- periodic in the *Inventory Data Entry form*.

- **Selecting the Use Chemical Specific TPQ if Present checkbox tells MSDSpro to use a threshold planning quantity specific to a Chemical if one has been entered.**

A TPQ for a Chemical is entered in the *Chemical Data Entry form*.

SARA Title III (Tier 2) (Cont'd)

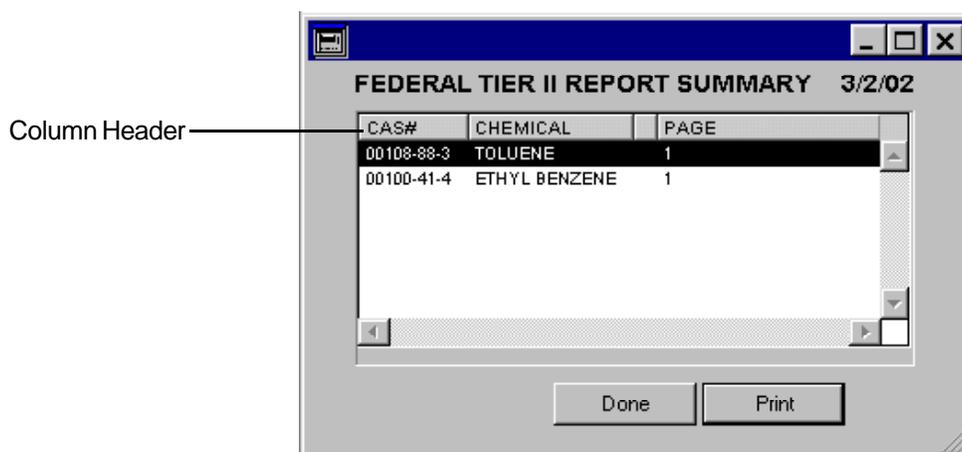
- **Selecting the Chemical Inclusion Report checkbox prints out this additional report.**

The Chemical Inclusion report provides a list of every Chemical in the *SARA Title III (Tier 2)* report and shows which Products contain each Chemical as an Ingredient.

8. **Select whether the report to be generated should be the Federal, Texas or Louisiana SARA Title III (Tier 2) report or the PA ACT 165 report.**
9. **Click PRINT to print the report(s) selected.**

Once the SARA Tier II report is finished, you may print an index of the report called the *Federal Tier II Report Summary*. This summary may be sorted by CAS#, Chemical Name or Page Number.

Federal Tier II Report Summary:



- **Click on a column header to sort the summary by that column.**

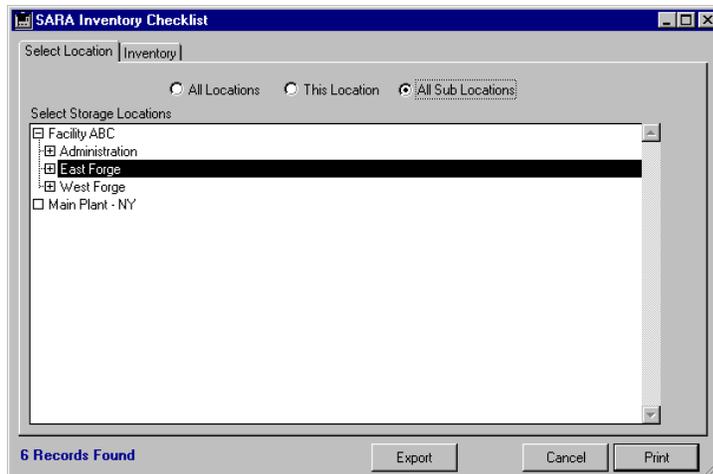
SARA Inventory Checklist

MSDSpro generates the annual *SARA Title III (Tier 2)* report based on Inventory and quantities. The *SARA Inventory Checklist* may also be saved to the hard drive for external data collection use.

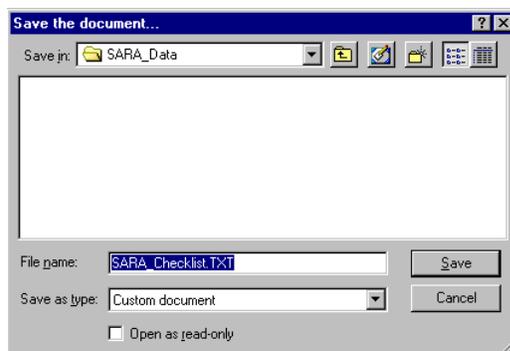
To export a *SARA Inventory Checklist*:

1. Choose **SARA Inventory Checklist** from the **Reports Control Panel**, and click **SELECT**.
2. Select the **Location** to report.

The Inventory records associated with the Location are found and the number found is shown.



3. Click the **EXPORT** button.
4. Type a filename for the new file in the *Save File* window.



5. Click the **SAVE** button to export the data to the new file.

Labels

Container *Labels* are available from the *Reports Control Panel*.

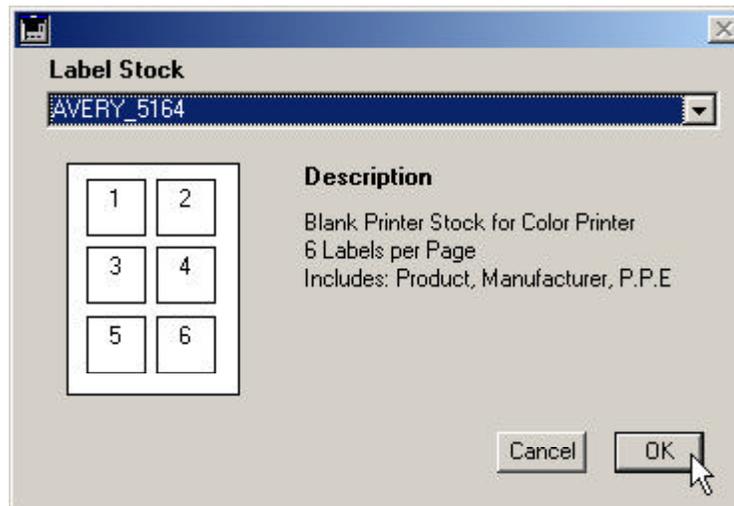
To create *Labels*:

1. Select *Labels* from the *Reports Control Panel*, and click on the **SELECT** button.
2. Select **Use All Records** or **Execute Query to Find Records**, and click on the **SELECT** button.

Usually, executing a query to find records is the best method to print Labels. For detailed information describing how to use the *Query editor* see *The Query Editor* in *Database Conventions*.



3. Select the Label Stock from the pull down and press **OK**.

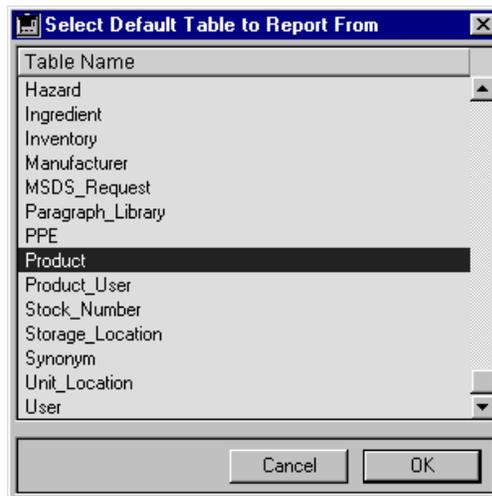


Custom Reports (Ad-Hoc Quick Reports)

Custom Reports (Ad-Hoc Quick reports) are available from the Reports Control Panel.

To create a *Custom Report*:

1. **Select *Custom Reports* from the *Reports Control Panel*, and click on the **SELECT** button.**
2. **In the list of table names, select the default table to report from.**



3. **Enter a search criteria using the *Query editor*.**

For detailed information describing how to use the *Query editor*, see *The Query Editor* in *Database Conventions*.

4. **Create the Quick Report using the graphical *Quick Report editor*.**

For detailed information describing how to use the *Quick Report editor*, see *Quick Reports* in *Database Conventions*.

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MSDSpro Web Technology

Understanding MSDSpro Web Server

MSDSpro Web Server was created to be a simple, reliable method to deliver high quality standardized MSDS documents to employees over a company network, or *intranet*, with zero administration.

The problem associated with traditional web servers and intranet systems is the high cost of maintenance. Imagine the amount of effort needed to compile and publish hundreds or thousands of MSDS documents for searching and viewing through a web browser on your company intranet. A great deal of time and effort is therefore saved by relying upon a dynamic database system to deliver this information in an effective manner.

MSDSpro Web Server is the most simple and effective database delivery of standardized MSDS documents available. The web browsers can be Netscape Navigator® or Internet Explorer® for Windows® Macintosh®, Power Macintosh®, or UNIX.

When MSDSpro Enterprise or MSDSpro PlusWeb is launched, the **internal web server** is started (no additional web server application or service is used). It uses a variable number of internal “web processes” which “listen” on the specified TCP Port Number for incoming Web User requests. Each Web User request is handled individually and concurrently, producing a high-performance multiprocessing web server that is adaptable to all environmental conditions. Web Server configuration and tuning is allowed by optimizing settings in the Web Server Control Panel.

To access MSDSpro Web Server from a web browser, simply type the TCP/IP address (or if configured, the DNS name of the computer) in the “Location” or “Address” field of the web browser. For example, entering “192.168.0.3” will access the MSDSpro Web Server which is located at the IP Address of 192.168.0.3. No special addresses or filenames are needed.

MSDSpro Web Server Requirements

MSDSpro Web Server requires that TCP/IP (“IP”) be correctly installed on the computer used as the web server. The IP address must be a static IP address.

NOTE: *If another web server application or service is currently running on the same machine, a TCP port number conflict may arise. Simply change the port number of either MSDSpro Web Server or the other web server application or service from the default value of 80 to another number, such as 81. To refer to this alternate IP address from any web browser, simply type the original IP address, such as 192.168.0.3, with an additional “:” and the new port number, such as 81. In this case, the web browser Location/URL would read “192.168.0.3:81”.*

Launching MSDSpro Web Server

To Launch MSDSpro Enterprise Web Server:

1. Launch MSDSpro 4D Server. (See pg. 1-4)

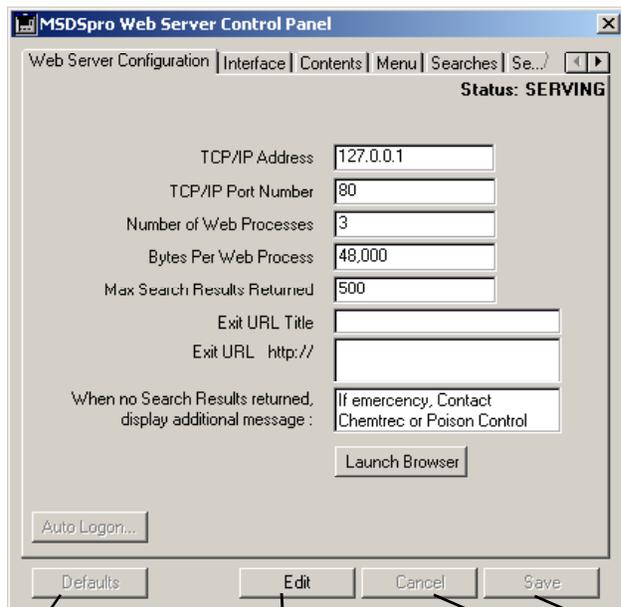
To Launch MSDSpro PlusWeb Web Server:

1. Launch MSDSpro PlusWeb. (See pg. 1-16)
2. Logon as any user.

Configuring Web Server Settings

MSDSpro Web Server settings can be configured at any time by opening the MSDSpro *Web Server Control Panel*, allowing review and modification of the internal web server configuration. Open the *Web Server Control Panel* by selecting it from the Windows pull-down menu (MSDSpro PlusWeb), or by clicking on the **MODIFY WEB SETTINGS** button within the server application window (MSDSpro Enterprise), or by selecting Web Settings from Admin - Special functions (MSDSpro Plusweb or MSDSpro client).

Web Server Control Panel - Web Server Configuration Tab



To revert all settings back to the original defaults, click the DEFAULTS button.

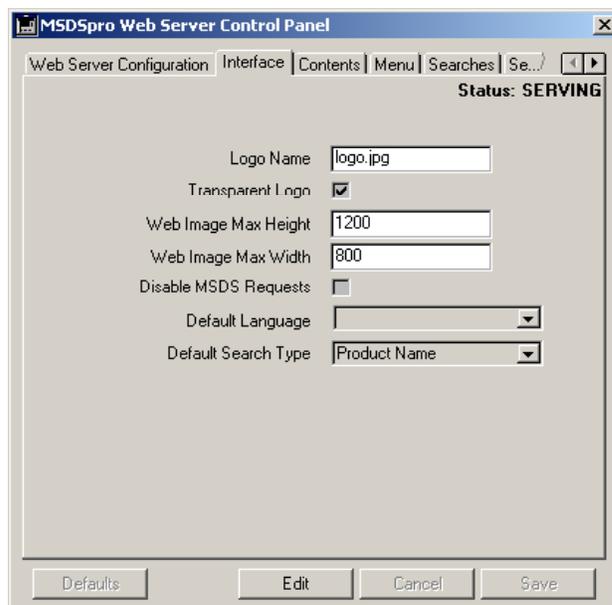
To edit the configuration, click the EDIT button.

After editing the configuration you can CANCEL or SAVE the changes.

Web Server Control Panel - Web Server Configuration Tab (Cont'd)

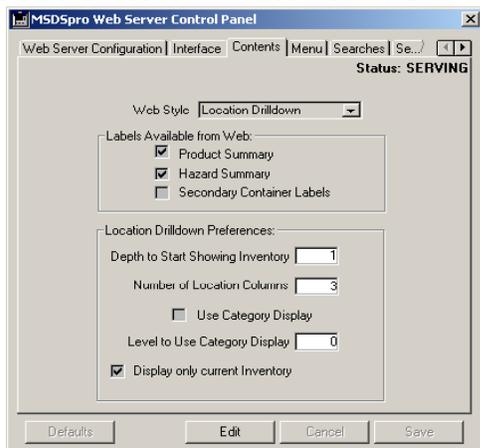
- **TCP/IP Address:** The address as configured in the Operating System (OS) network settings.
- **TCP/IP Port Number:** The port upon which the MSDSpro Web Server is broadcasting. The default value for the TCP/IP Port Number is 80.
- **Number of Web Processes:** The number of “listening” processes at any time. The maximum number of Web Processes is limited by available RAM. Default value is 3.
- **Bytes Per Web Process:** The amount of RAM to dedicate to each Web Process. The default value for Bytes Per Process is 48,000.
- **Max Search Results Returned:** The maximum number of matching records returned when a search is performed via the web browser. The default value is 500.
- **Exit URL Title:** The title under the company logo which indicates the company logo can be clicked to exit the MSDSpro area and “return” to another web URL/location.
- **Exit URL HTTP://:** The URL/location which will be used by the company logo when the web browser clicks the graphic image in the web interface to “return” to another web URL/location.
- **No Search Results Additional Message:** An additional message to display on the web browser following a query when no search results are found.
- **AUTO LOGON button:** Clicking this button will create a file called AUTOLOGON.TXT, found in the MSDSpro Program folder. This file enables MSDSpro PlusWeb/Web CD to start in Web Server mode without entering a password. Hold down the Shift Key during startup to disable.

Web Server Control Panel - Interface Tab



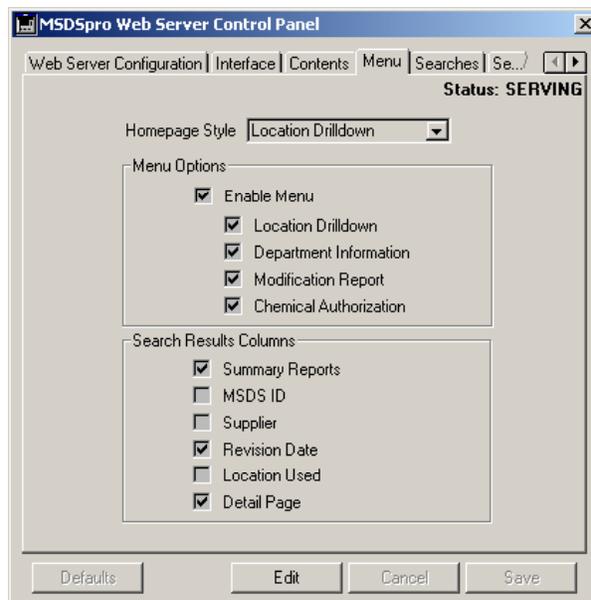
- **Logo Name:** The name of the .JPG or .GIF file that will be used as the company logo on the web search interface. The shape of the graphic should be square for the best appearance on the web browser. Default name is “logo.jpg”.
- **Transparent Logo:** Select this if the color at pixel coordinates 1,1 should be replaced with a transparent color on the web browser. Default is OFF.
- **Web Image Max Height and Width:** If MSDS document *images* are sent to the web browser, these settings determine the maximum size the image will be displayed on the browser interface. Note: the images are not modified, they are displayed by the web browser at a different pixel size.
- **Disable MSDS Requests:** MSDS documents can be requested through the web interface by the web user, if this MSDS Requests are not disabled. Default is OFF.
- **Default Language:** You can set the web browser default language to English, Spanish or French.
- **Default search Type:** The administrator can choose the specific field that will be the main search on the web browser.

Web Server Control Panel - Contents Tab



- **Web Style:** Controls the appearance and functionality of the MSDSpro Web Interface.
- **Location Drilldown:** MSDS searches are performed within a specific Location or level of Locations. See pp. 8-10 through 8-13.
- **Classic:** MSDS searches are performed based on Product Name, Manufacturer, MSDS ID, CAS Number, Locations, Stock Numbers or Ingredient Name.
- **Product Summary Label:** Users may view the Product Summary, which includes Manufacturer emergency contact information and NFPA/HMIS information, if available.
- **Hazard Summary Label:** Users may view the Manufacturer emergency contact information, Synonyms, NFPA/HMIS information, if available. Also included is information entered under the PPE, Routes of Entry, Target Organs, Physical Hazards and Health Hazards tabs in the product record
- **Secondary Containment Labels:** This selection activates the Label printing through the browser. See section 9-17.
- **Depth to Start Showing Inventory:** Depth at which MSDS links to products in a location's inventory will be displayed. If the depth is set to 2, then inventory will be displayed at the second level as in Warehouse A -> Room 1.
- **Number of Location Columns:** Number of columns in which Location links will be displayed in.
- **Level to use Category Display:** Level at which the category display should be used.
- **Use Category display:** Show the Levels of Inventory at once for Easier Drill Down.
- **Display only current Inventory:** Displays only products whose End Date has not already arrived.

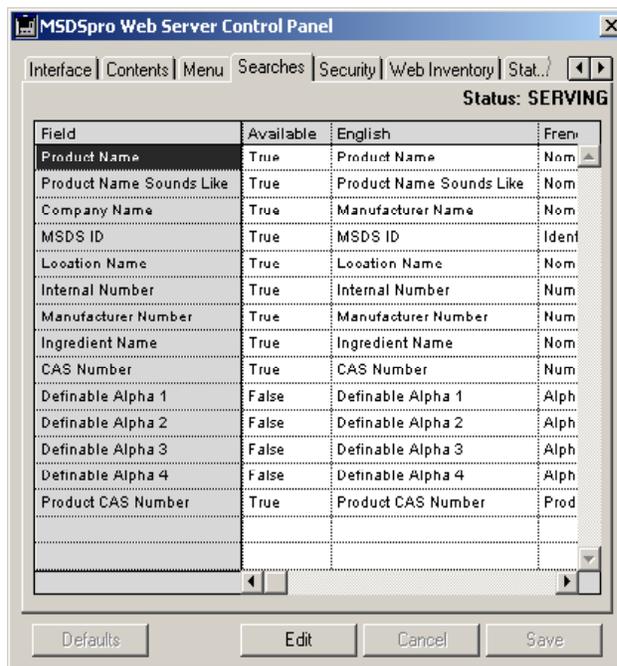
Web Server Control Panel - Menu Tab



The **Menu tab** controls what functionality is available when the Menu hyperlink is clicked on in the MSDSpro Web Interface.

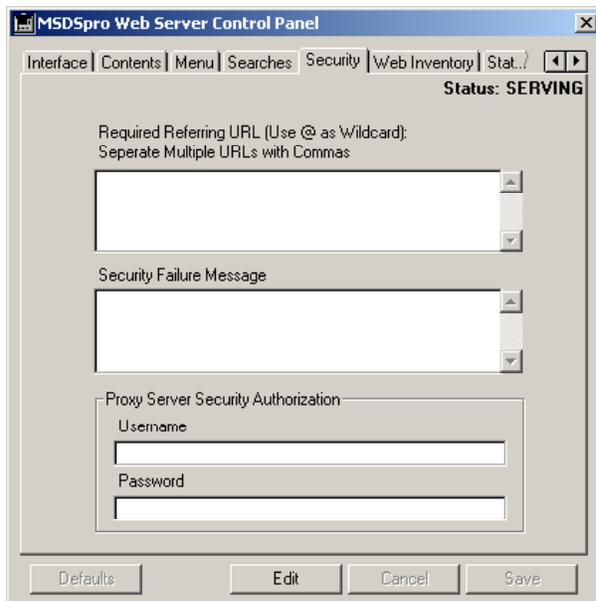
- **Homepage Style:** Determines if the Menu or Location Drilldown will be displayed from the homepage by default.
- **Enable Menu:** Turns the Menu hyperlink on and off.
- **Location Drilldown:** Turns the Search for MSDS by Inventory Location hyperlink on and off.
- **Department information:** Turns the Waste Codes and Products by Department hyperlink on and off.
- **Modification report:** Turns the List of product modifications hyperlink on and off.
- **Chemical Authorization:** Turns the Search for Chemical Authorization Request and create a new Chemical Authorization Request hyperlinks on and off.
- **Search Results Columns:** Checking and unchecking each individual search results column checkbox determines whether or not that information is displayed for each product record returned as a search result.

Web Server Control Panel - Searching Tab



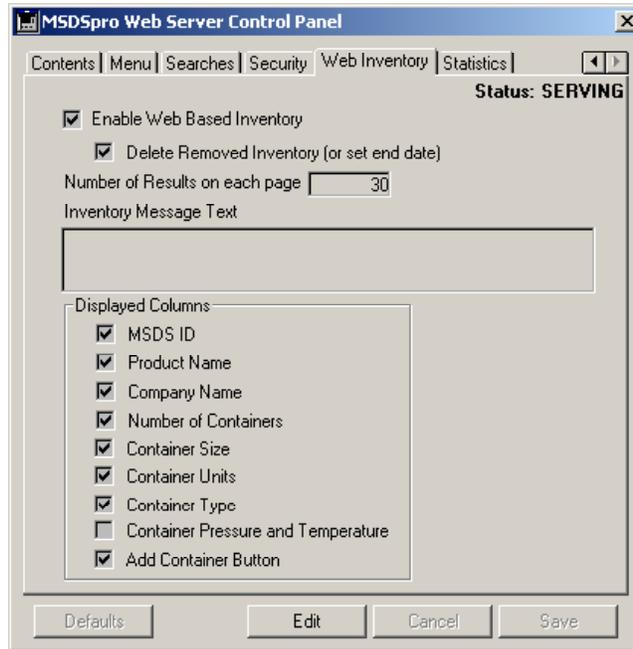
- **Available column:** Indicates whether or not the field is available for searching. If set to True, the field is available for searching.
- **Field column:** Indicates the name of the field in the software.
- **English column:** How the field name will be displayed in the English portion of the Web Interface.
- **French column:** How the field name will be displayed in the French portion of the Web Interface.
- **Spanish column (not shown):** How the field name will be displayed in the Spanish portion of the Web Interface.

Web Server Control Panel - Security Tab



- **Required Referring URL:** Specifies a URL location (web address) which all web browsers must come from in order to use the MSDSpro web interface. If the web browser links to MSDSpro directly from this URL, the web browser will be allowed to use the MSDSpro web interface. If the web browser does not link to MSDSpro from the specified URL, the Security Failure Message is displayed and no access to the MSDSpro web interface is allowed. The specified Required Referring URL should have security methods implemented as part of a standardized network security system.
- **Security Failure Message:** A message displayed when a web browser attempts to utilize the MSDSpro web interface without properly linking from the Required Referring URL.
- **Proxy Server Username:** Specifies the username required by the Proxy Server in order for MSDSpro to import an MSDS from the Internet. Not all Proxy Servers require a valid username.
- **Proxy Server Password:** Specifies the password required by the Proxy Server in order for MSDSpro to import an MSDS from the Internet. Not all Proxy Servers require a valid password.

Web Server Control Panel - Web Inventory



Enable Web Based Inventory: Allows administrators to update their current inventory from the web.

Delete Removed inventory: When a product is removed from the set location, the data will be deleted. If not checked removed inventory has the end date set, but still remains in the system.

Number of Results on each Page: The number if inventory records that will be displayed on a single page.

Inventory Message Text: Any text here will be displayed on the web inventory.

Displayed Columns: Specifies the columns that will be seen from the web inventory pages.

See section 9-34 for the web browser side of the WIM functionality.

Web Server Control Panel - Statistics Tab

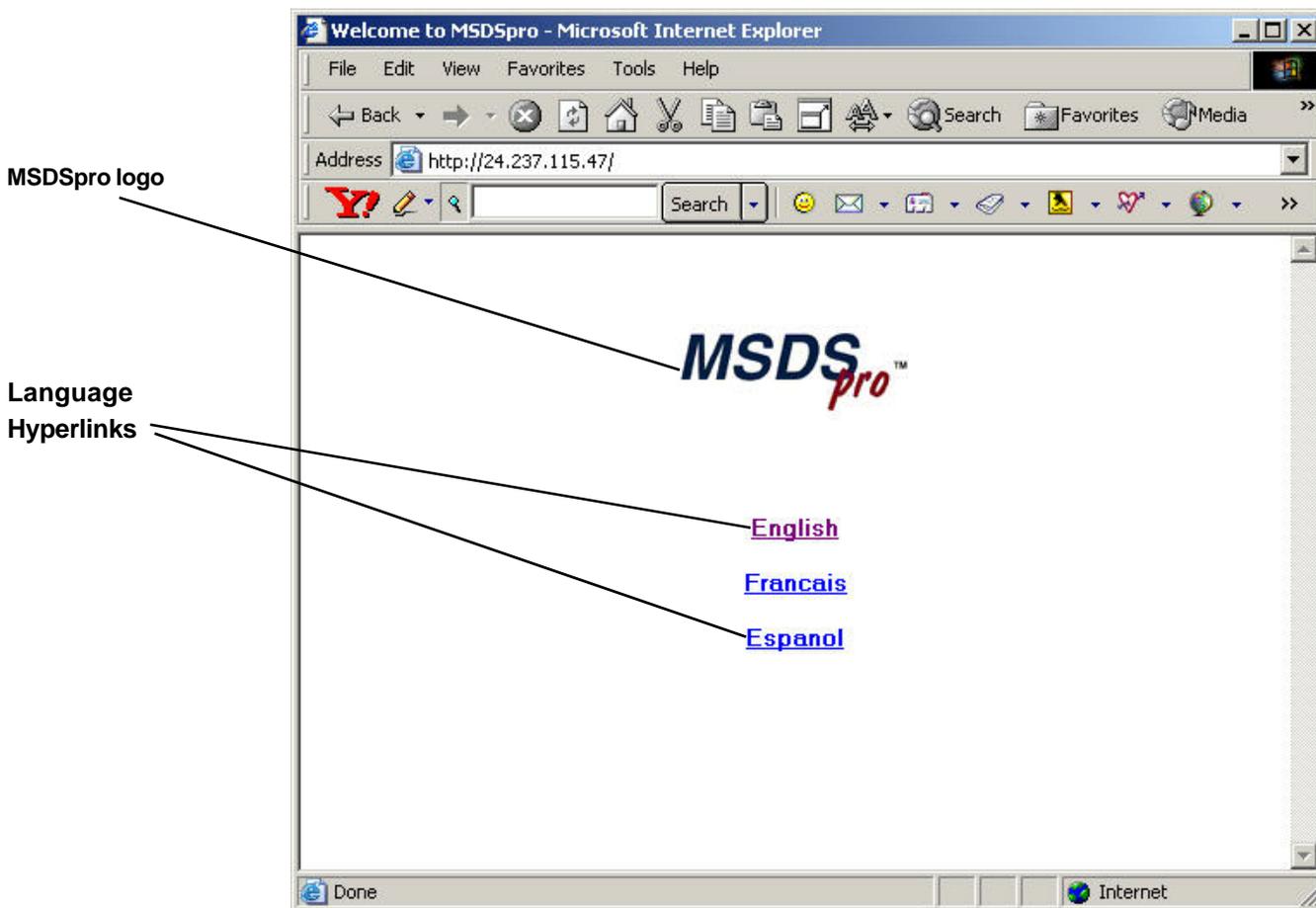
- The Statistics tab is not available from the client interface.

Statistic	Value
Session Start Date	11/30/2003
Total Requests Handled	42
Avg Response (In Ticks)	6
Total Products	24
Total Manufacturers	35,724

- **Session Start Date:** The date the Web Server was started.
- **Total Requests Handled:** The number of “hits” the Web Server has handled since the session start date.
- **Avg Response:** The average time required to process each web request (expressed in ticks, 1/60th of 1 second).
- **Total Products:** The total number of Product records in the database at any given time.
- **Total Manufacturers:** The total number of Product Manufacturer records in the database at any given time.

Using the MSDSpro Web Interface

The web interface allows users who have access to the company intranet to view information in the MSDSpro database using their web browser. To view the MSDSpro database via the Web Interface, enter into the web browser the Internet Protocol (IP) address of the computer from which the MSDSpro Web Server has been installed. For example, entering “http://24.237.115.47” will access the MSDSpro Web Server which is located at the IP Address of 24.237.115.47. Determining what IP address the MSDSpro Web Server is broadcasting on is covered on pages 8-2 and 8-3.



The first screen user’s encounter when using the Web Interface is the “**Welcome to MSDSpro screen**”. The “**Welcome to MSDSpro screen**” consists of the MSDSpro logo and three hyperlinks. These hyperlinks serve up the rest of the MSDSpro Web Interface in three different languages; English, French, and Spanish. Click on the hyperlink for the desired language. Once a language has been chosen, the remaining portion of the web interface is served up in one of two differing layouts; the Location Drilldown Interface and the Classic Interface.

Note: If a default language has been selected, the user will jump right to the main page for the selected language. See 9-4 for setting the Default Language.

Location Drilldown Interface:

The Location Drilldown interface is designed to allow users to view product information from the MSDSpro database via their web browser. The Location Drilldown Interface consists of the Search Area, the Current Location Bar, the Search by Location Area and the Search Results Area:

The screenshot shows the MSDSpro web interface in a Microsoft Internet Explorer browser window. The address bar shows <http://127.0.0.1/locdet32>. The page title is "MSDSpro".

Search Area: Contains search criteria radio buttons for "Product Name", "MSDS ID", "Manufacturer Name", and "Product Name Sounds Like". It also includes a "Search By" dropdown menu set to "MSDS", a "Search" button, and a "Search Method" section with radio buttons for "Word Begins With" and "Word Contains", and a checkbox for "Exclude CD Rom MSDS library from search".

Current Location Bar: Shows the breadcrumb "Home > Main Plant Corporate [Edit Inventory]" and a "Search for location" link.

Search by Location Area: Features a "Search By Location" dropdown menu currently set to "Administration".

Search Results Area: Displays "1 - 8 of 8 found" and a table of results:

Summary/ Hazard	Product Name / Synonym	Manufacturer	Revision Date	
	CHEVRON MACHINE OIL R&O ISO 150	CHEVRON	08/14/1993	[Details]
	HYDROCHLORIC ACID CONCENTRATED	J.T. BAKER	11/12/2001	[Details]
	MAGNAGLO PREPARED BATH 14 AM	MAGNAFLUX	06/06/2002	[Details]
	SODA LIME	J.T. BAKER	11/02/2001	[Details]

The footer includes "This site powered by MSDSpro" and "Menu Help" links.

Labels and Callouts:

- Search Area:** Points to the top search section.
- Search Method Parameters:** Points to the search method radio buttons.
- Current Location Bar:** Points to the breadcrumb navigation.
- WIM:** Points to the "Word Begins With" radio button.
- Search by Location Area:** Points to the "Search By Location" dropdown.
- Hyperlinks to Location Inventories:** Points to the "Administration" dropdown option.
- Search Results Area:** Points to the table of search results.
- Product and Hazard Summary Hyperlinks:** Points to the product names in the table.
- Search Criteria Radio Buttons:** Points to the search criteria radio buttons.
- Company Name:** Points to the "MSDSpro" logo.
- Search for Location Hyperlink:** Points to the "Search for location" link.
- Company Logo:** Points to the "MSDSpro" logo.
- Hyperlink to www.MSDSpro.com:** Points to the "MSDSpro" logo in the footer.
- Hyperlink to MSDS:** Points to the "MSDS" text in the footer.
- Hyperlink to Product Inventory & Product Details:** Points to the "[Details]" link in the table.
- Hyperlink to MSDSpro web menu & help file:** Points to the "Menu Help" link in the footer.

Search Area: The Search Area is the top portion of the Location Drilldown Interface. In the Search Area, the data to be searched for is entered and the search parameters are set. The Search Area contains the Search field, the Search Criteria and Search Method radio buttons, and the Company Logo.

Location Drilldown Interface (Cont'd)

Search by MSDS field: The Search by MSDS field is where the search criteria is entered.

Search Criteria radio buttons: The Search Criteria radio buttons define what will be searched upon. For example, performing a search with "Product Name" selected will return matches only to the Product Name field within the product record. The Search Criteria radio buttons include:

- **Product Name**
- **MSDS ID**
- **Manufacturer Name**
- **Product Name Sounds Like**

Search Method parameters: The Search Method parameters define how searching will occur. They are:

- **Word Begins With/Word Contains:** The search method "Word Contains" finds only those records in the database or library that contain the search criteria. Word Begins With finds only those records that begin with the search string.
- **All Locations/Only this Location/All Sub Locations:** Determines which locations will be included in the search. If All Locations is selected, the search string will search for products as inventory at all locations as well as products that are not currently linked to any inventory locations. Choosing Only this Location will search for products only at the location listed in the Location Bar. Choosing All Sub Locations searches all the sublocations that have been created in MSDSpro. A sublocation is a location that is a subsidiary of another location.
- **Exclude/Include CD-ROM MSDS library:** Determines whether or not the MSDSpro CD Library will be included in the search.

Company Logo: The company logo resides on the right hand side of the Search Area. The company logo is added to the web interface from the **Company Interface** tab under the *Administrative Preferences Entry form*. It displays the logo of the company that has purchased MSDSpro. The company logo is also a hyperlink. The company logo and the Internet address (URL) of the company logo's link is set in the Web Server Control Panel.

Search by Location Area: The search by location portion of the web interface displays the sublocations for the current location. In the figure on the preceding page, the web interface is displaying Storage rooms 1, 2, 3, & 4, sublocations of the current location, Chemical Warehouse.

Search Results Area: The Search Results Area displays the search results for the current search. Search results are displayed in columns many of which can be turned on or off at any time via the Web Server Configuration selection on the Admin Control Panel. Columns that can be displayed in the Search Results Area include:

- **Summary/Hazard column:** The Summary/Hazard column hyperlinks to the product summary and hazard summary pages.

The Product and Hazard Summary pages are further described on pp. 8-18 and 8-19.

Location Drilldown Interface (Cont'd)

- **Hyperlink to www.MSDSpro.com:** The graphic stating “This site powered by MSDSpro” can be clicked on to jump the web browser to the MSDSpro LLC company website.
- **Product Name column:** The Product Name column lists the name of the product. The product name is also a hyperlink to the MSDS for the product.
- **Manufacturer column:** The Manufacturer column lists the name of the manufacturer of the product.
- **Supplier column:** The Supplier column lists the name of the company from which the product was purchased.
- **Revision Date column:** The Revision Date column lists the date on which the product was last revised. This date is found either on the MSDS or in the Revision Date field on the Product Dates tab within the Product record.
- **Locations hyperlink:** The Locations hyperlink links to a list of the locations where the product is stored as inventory.
- **Details hyperlink:** The Details hyperlink links to a page displaying additional details about the product.
- **The Help hyperlink** links to the MSDSpro web interface help file
- **The Menu hyperlink** displays hyperlinks that allow the MSDSpro Administrator to perform additional tasks from the MSDSpro web interface.

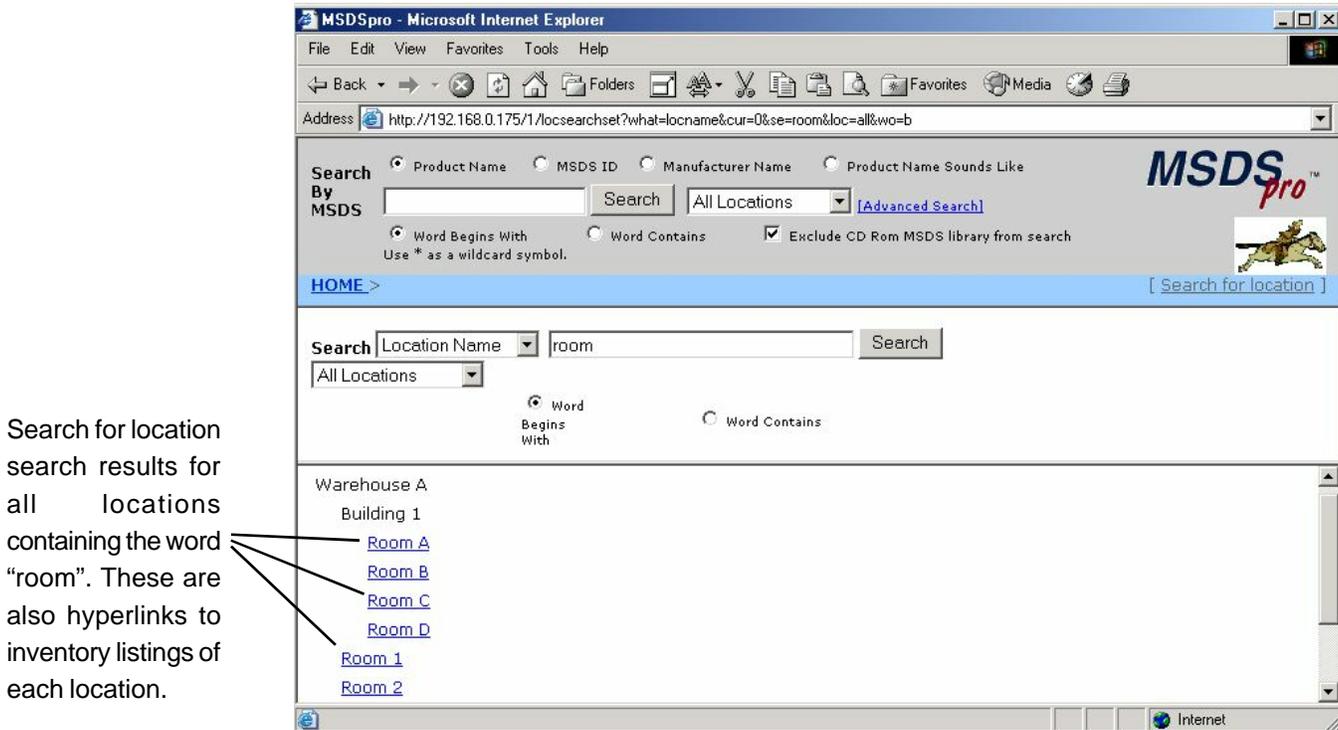
These tasks are set to be either hidden or displayed from the Web Server Configuration selection on the Admin Control Panel. The tasks the hyperlinks link to include:

1. **Search for MSDS by Inventory Location**
2. **Search for Chemical Authorization Request**
3. **Create a new Chemical Authorization Request**
4. **List of product modifications**
5. **Waste Codes and Products by Department**

The execution of these tasks is described on page 8-17 through 8-19.

Current Location Bar: The Current Location Barr shows which location, if any, is currently having its inventory and/or sublocations displayed. If the search results displayed are not part of a location's inventory, then the Current Location Bar displays only "HOME>". In the figure on Page 8-10, the inventory of location “Chemical Warehouse” is currently being displayed. The Current Location Bar also contains the "Search for Location" hyperlink.

Location Drilldown Interface (Cont'd)



Search for location search results for all locations containing the word "room". These are also hyperlinks to inventory listings of each location.

Search for Location Hyperlink: The search for location hyperlink searches for locations matching information entered into the Search for Location field. Clicking on the Search for Location hyperlink loads the Search for Location area into the web interface. Search Methods included in the Search for Location area include Word Begins With/Word Contains and All Locations/All Child Locations. In the above graphic the location "Building" has been searched for and the matching search results are displayed as hyperlinks to each location's inventory.

Location Drilldown Interface Advanced Search

Advanced Search

Field	Criteria	
Product Name		<input checked="" type="radio"/> Word Begins With <input type="radio"/> Word Contains
Product Name Sounds Like		<input checked="" type="radio"/> Word Begins With <input type="radio"/> Word Contains
Manufacturer Name		<input checked="" type="radio"/> Word Begins With <input type="radio"/> Word Contains
MSDS ID		<input checked="" type="radio"/> Word Begins With <input type="radio"/> Word Contains
Location Name		<input checked="" type="radio"/> Word Begins With <input type="radio"/> Word Contains

All Conditions Any Conditions
 Exclude CD Rom MSDS library from search

[Advanced Search Instructions](#)

1. Select 1-5 fields to search on.
2. Enter the search criteria for each field you wish to search.
3. Select if you want the search to include results that match all of your criteria or any of the criteria.

Location Drilldown Interface Advanced Search: The Advanced Search feature within the Location Drilldown Interface is accessed by clicking on the Advanced Search hyperlink. This feature allows for searching multiple product record fields simultaneously. The Advanced Search Interface consists of the search fields and the search parameters. The search fields include:

- **Product Name:** The product as named in the Product record.
- **Product Name Sounds Like:** Product names that sound similar to the search string.
- **Manufacturer Name:** The manufacturer as named in the Product and Manufacturer records.
- **MSDS ID:** The identification number assigned to a product when a new product record is created. The MSDS ID is located on the *Product tab* within the Product record.

Location Drilldown Interface Advanced Search (cont'd)

- **Location Name:** The name assigned to a inventory location created in MSDSpro.
- **Internal Number:** A number created and assigned to a specific product for the purpose of tracking product inventory. Entering an Internal Number into MSDSpro is covered in section four of the MSDSpro Administrator guide.
- **Manufacturing Number:** A number created by the Manufacturer of the product. Entering the Manufacturer number is covered in section four of the MSDSpro Administrator guide.
- **Ingredient Name:** The name of a chemical that comprises a portion of a product.
- **CAS Number:** A number assigned to a chemical by the Chemical Abstracts Service.

Search Method Parameters: The Search Method parameters define how searching will occur. They are:

- **All Conditions/Any Conditions:** Determines whether information in the database will have to match all of the criteria or any one criteria entered in the advanced search fields.
- **Exclude/Include CD-ROM MSDS library:** Controls whether or not the MSDSpro CD Library will be included in the search.

Location Drilldown Interface Details Page

The Details hyperlink links to the Detailed Information page. The Detailed Information page displays additional information about the product. Information about the product available from the Detailed Information page includes:

- **PPE phrases:** PPE phrases describe personal protective equipment to be used with the product.
- **First Aid Phrases:** First aid phrases describe first aid procedures to be used in case of an accident involving the product.
- **Waste Codes:** Waste codes describe appropriate disposal methods of the product.
- **Summary Sheets and Labels:** The Summary Sheets and Labels section contains hyperlinks to the product and hazard summary sheet pages for this product and to a list of inventory locations.

Product and hazard summary sheet pages are covered on pp. 8-24 and 8-27.

- **Authorized Departments:** The Authorized Departments section of the Detailed Information page displays the departments that have been approved to use the product.
- **Product Synonyms:** Product synonyms displays a list of names that the product might otherwise be called.
- **Density:** Density shows the volume displaced by a certain mass of the product.
- **Specific Gravity:** Specific gravity displays the ratio between the density of the product and the density of water.
- **Ingredients:** Ingredients lists the constituent chemicals of which the product is composed.

Location Drilldown Menu Functionality

The Menu hyperlink displays hyperlinks that allow the MSDSpro Administrator to perform additional tasks from the MSDSpro web interface.

These tasks are set to be either hidden or displayed from the Web Server Configuration selection on the Admin Control Panel. The tasks the hyperlinks link to include:

1. **Search for MSDS by Inventory Location**
2. **Search for Chemical Authorization Request**
3. **Create a new Chemical Authorization Request**
4. **List of product modifications**
5. **Waste Codes and Products by Department**

To Search for an MSDS by Inventory Location:

1. **Click on the Search for MSDS by Inventory Location hyperlink.**
2. **Click on the link of the location in which the MSDS is to be searched for or click on the link of the parent location that contains the location in which the MSDS is to be searched for.**
3. **If the location in which the MSDS is to be searched for does not display any inventory, set the Depth to Start Showing Inventory field to 1 within the Web Server Control Panel.**

The Web Server Control panel is accessed via the Web Server Configuration radio button on the Admin Control Panel.

To Search for a Chemical Authorization Request (C.A.R.):

1. **Click on the Search for Chemical Authorization Request hyperlink.**
2. **Select the field in which to search for the search item.**
3. **Enter into the search field the information by which the C.A.R. is to be searched.**

For Example, select the Product Name radio button and enter the product name WD-40 into the search field if you wish to find a C.A.R. for WD-40.

4. **Click on the SEARCH Button.**
5. **If the C.A.R. desired is listed in the search results, select it and click on the CONTINUE button to view its details.**

Clicking on the **RESUME CAR ENTRY** button allows additional information to be entered into the C.A.R form if the C.A.R. status is currently set to “not submitted” and the user clicking on the button is the original C.A.R. author.

Location Drilldown Menu Functionality (Cont'd)

To Search for a List of product modifications:

1. **Click on the List of product modifications hyperlink.**
2. **Enter the term to be searched for and select the field in which to search for the search item.**
3. **Select either the Word Contains or Word Begins With radio button.**
4. **If desired, check the Search only in specified Date Range checkbox and enter the dates in which modifications to the product must have been made.**
5. **Click on the SEARCH Button.**
6. **Click on the product name in any of the search results to see the changes that were made to the product record at that time.**

To Create a new Chemical Authorization Request:

1. **Click on the Create a new Chemical Authorization Request hyperlink.**
2. **Enter the Employee ID and the information to be searched for in the C.A.R. records.**
3. **Select the radio button corresponding to the field in the C.A.R. record in which the information is to be searched for.**
4. **Click on the CONTINUE button.**
5. **Once search results have been returned, selecting the radio button for a specific product will allow for the creation of a new C.A.R. with information relating to that product already entered.**

Clicking on a product name will display a specific C.A.R. submitted for that product.

6. **If the search results do not display a C.A.R. from which information can be used to create a new C.A.R., select the Request a New Product radio button and click on the CONTINUE button.**
7. **Fill out the required fields in the C.A.R. and any desired additional information.**
8. **Click on the CONTINUE button to move to the next step in the C.A.R. submittal process or click on the SAVE AS DRAFT button to save this C.A.R. for submittal at a later date.**
9. **Review the information entered into the C.A.R. for accuracy**
10. **Click on the EDIT ENTRY button to go back and edit the information in the C.A.R. or click on the SUBMIT CAR button to submit the C.A.R. or click on the SAVE AS DRAFT button to save this C.A.R. for submittal at a later date.**

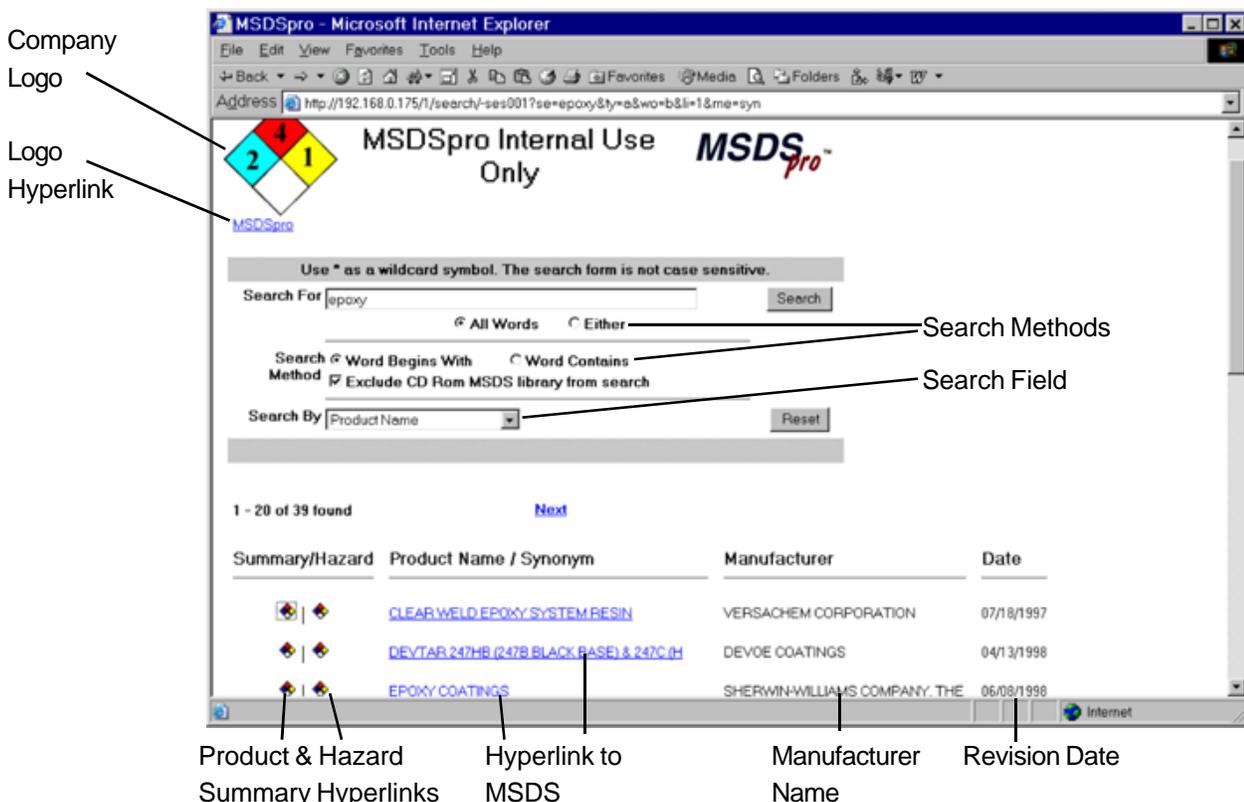
Location Drilldown Menu Functionality (cont'd)

To Search for a List of Waste Codes and Products by Department:

1. **Click on the Waste Codes and Products by Department hyperlink.**
2. **Select either the Product or the Waste Code radio button.**
3. **Enter the name of the Department to be searched for.**
4. **Click on the SEARCH button.**

Classic Interface:

The Classic Interface is a simplified interface that allows the end user to search for MSDSs using a wider variety of search criteria than does the Location Drilldown Interface. The Classic Interface consists of the Search Area and the Search Results Area.



Search Area: The search area is the top portion of the Classic Interface. In the search area, the search criteria and the parameters of the search are entered. The Search Area contains the Search Criteria, the Search field, the Search Method parameters, the Web Logo and the Logo Hyperlink.

Search Criteria: The Search Criteria is where the words to search for are entered.

Search Method parameters: The Search Method parameters define how searching will occur. They are:

- **Word Begins With/Word Contains:** The search method “Word Contains” finds only those records in the database or library that contain the search criteria. Word Begins With finds only those records that begin with the search string.
- **All words/Either Word:** Controls if MSDSpro will search for all of the words or any of the words in the search string.
- **Exclude/Include CD-ROM MSDS library:** Controls whether or not the MSDSpro CD Library will be included in the search.

Classic Interface (Cont'd)

Search field: The Search field selects which field will be searched. Performing a search with “Product Name” selected will return matches only to entries made in the Product Name field within the product record. Search Criteria include:

- **Product Name:** The product as named in the Product record.
- **MSDS ID:** The identification number assigned to a product when a new product record is created. The MSDS ID is located on the *Product tab* within the Product record.
- **Manufacturer Name:** The manufacturer as named in the Product and Manufacturer records.
- **Product Name Sounds Like:** Product names that sound similar to the search string.
- **Ingredient CAS Number:** A number assigned to a chemical by the Chemical Abstracts Service.
- **Stock Number (Internal):** A number created by the company that has purchased MSDSpro and assigned to a specific product for the purpose of tracking product inventory.
- **Stock Number (Mfg.):** A number created by the manufacturer of the product.
- **Ingredient Name:** The name of a chemical that comprises a portion of a product.

Web Logo: In the Classic Interface, the web logo is much more prominently displayed than it is in the Location Drilldown Interface. The web logo is added to the web interface from the **Company Interface** tab under the *Administrative Preferences Entry form*. It is usually the logo of the company that has purchased MSDSpro. The web logo is also a hyperlink. The web logo and the Internet address (URL) to which the web logo links to are set in the Web Server Control Panel. The Web Server Control Panel is covered on pp. 8-2 through 8-8.

Logo Hyperlink: The logo hyperlink is located below the web logo. It provides additional information about the website to which the logo links. In the graphic on the preceding page, the logo hyperlink is the word “MSDSpro”. It tells the user of the web interface that the company logo is hyperlinked to the MSDSpro website, www.MSDSpro.com.

Search Results Area: The Search Results Area displays information matching the word or words originally searched upon. Search results are displayed in five columns; Summary/Hazard, Product Name, Manufacturer, Date, and Locations.

- **Summary/Hazard column:** The Summary/Hazard column contains hyperlinks to the product summary and hazard summary pages. The product and hazard summary pages are described on pp 8-17 & pp. 8-18.
- **Product Name column:** The Product Name column lists the name of the product. The product name listed in the Product Name column is also a hyperlink to the product’s MSDS.
- **Manufacturer column:** The Manufacturer column lists the product’s manufacturer name.

Classic Interface (Cont'd)

- **Date column:** The date column lists the date on which the product was last revised.

This date is found on the *Product Dates* tab within the product record.

MSDS Document Page

The MSDS document is viewed by clicking the Product Name link in the Search Results area. In most cases, the MSDS will be viewable via the web browser. In other instances, the web interface will launch a separate application to display the MSDS. MSDSs in ANSI text format will open as a PDF file.

Your Company Name Here

Search By Product Name MSDS ID Manufacturer Name Product Name Sounds Like

acid Search All Locations [Advanced Search]

Word Begins With Word Contains Exclude CD Rom MSDS library from search

Use * as a wildcard symbol.

Home > [Search for location]

1 - 3 of 3 found

Summary/ Hazard	Product Name / Synonym	Manufacturer	Revision Date	
	HYDROCHLORIC ACID, CONCENTRATED	J.T. BAKER	11/12/2001	[Details]
	PYROGALLIC ACID	MALLINCKRODT	11/02/2001	[Details]
	TOLUENE	ULTRAMAR, INC.	01/01/2001	[Details]

1 - 3 of 3 found

Didn't find the required MSDS? [Click here to request an MSDS](#)

This site powered by **MSDS pro** [Help](#)

Product Summary Page

The Product Summary Page is retrieved by clicking the Product Summary hyperlink in the Search Results area. Click the browser's "Back" button to return to the main page. The Product Summary Page displays the following:

- **Product Name**
- **Manufacturer Name**
- **Manufacturer Emergency Phone, or if not listed, Manufacturer Phone**
- **Any listed hazardous ingredients, or if the Product is hazardous, all ingredients**
- **NFPA or HMIS rating for the product**

Product Summary Information

Product Name
HYDROCHLORIC ACID, CONCENTRATED

MSDS ID:
0009

Manufacturer
J.T. BAKER

Emergency Phone
(800) 424-9300

Location
Not Provided on this Summary

Hazardous Ingredients
Hydrogen chloride

Ingredient	CAS Number	Percent Weight
Hydrogen chloride	7647-01-0	10% - 33%
Water	7732-18-5	67% - 90%

NFPA Hazard Diamond: 3 (Blue), 0 (Red), 0 (Yellow), - (White)

[Click Here for NFPA Definition](#)

NFPA Definition Page

The NFPA Definition is retrieved by clicking the NFPA Definition link from the Product or Hazard Summary pages. The hazard rating is based on National Fire Protection Association (NFPA) rating. Click the browser's "Back" button to return to the Product or Hazard Summary page.

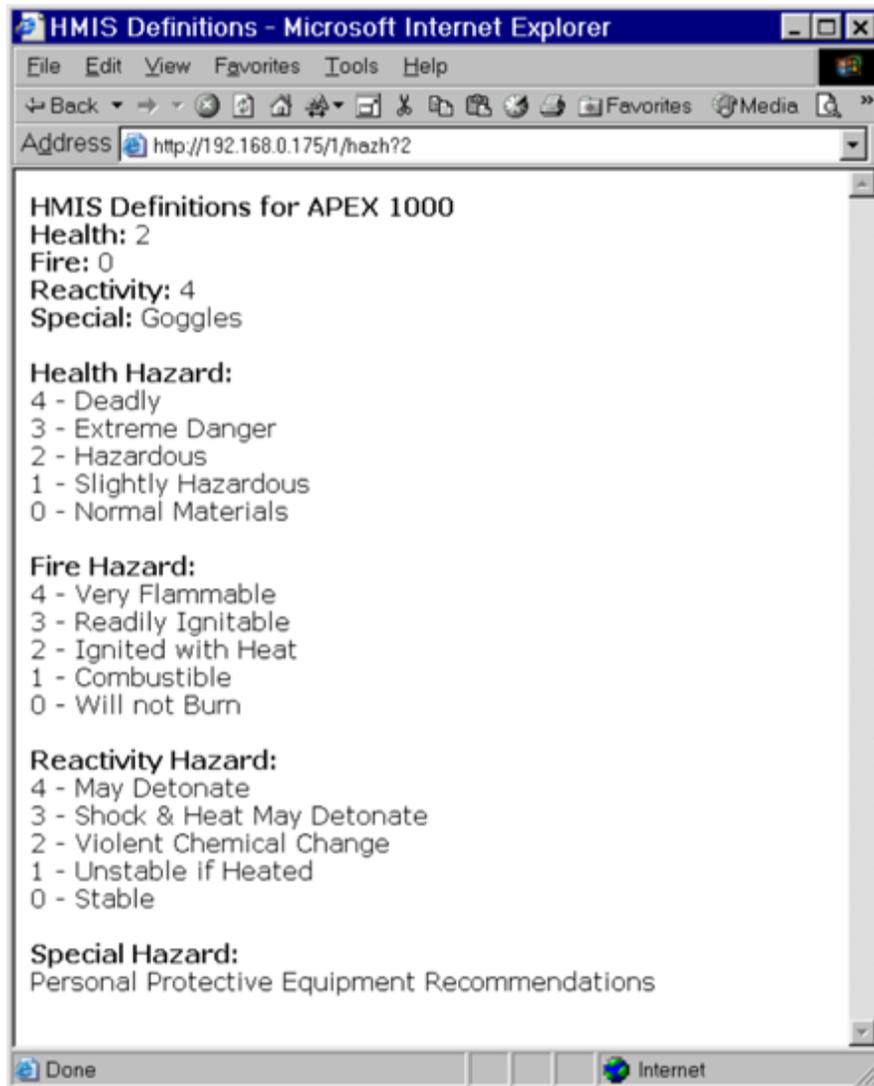
The screenshot shows a Netscape browser window with the following content:

- Health Hazard** (Blue section):
 - 4 - Deadly
 - 3 - Extremely Dangerous
 - 2 - Hazardous
 - 1 - Slightly Hazardous
 - 0 - Normal Material
- Fire Hazard / Flash Point** (Red section):
 - 4 - Below 70°F
 - 3 - Below 100°F
 - 2 - Below 200°F
 - 1 - Above 200°F
 - 0 - Will Not Burn
- Specific Hazard** (White section):
 - OX - Oxidizer
 - ACID - Acid
 - ALK - Alkali
 - COR - Corrosive
 - W - Use No Water
 - Radiation (with radiation symbol)
- Reactivity** (Yellow section):
 - 4 - May Detonate
 - 3 - Shock & Heat May Detonate
 - 2 - Violent Chemical
 - 1 - Unstable if Heated
 - 0 - Normally Stable

The diamond also displays numerical ratings: 3 in the blue section, 2 in the red section, and 4 in the yellow section. The white section contains the text 'OXI'.

HMIS Definition Page

The HMIS Definition is retrieved by clicking the HMIS Definition link from the Hazard Summary page. The hazard rating is based on Hazardous Materials Information System (HMIS) rating. Click the browser's "Back" button to return to the Hazard Summary page.



Hazard Summary Page

The Hazard Summary Page is retrieved by clicking the Hazard Summary hyperlink in the Search Results area. Click the browser's "Back" button to return to the main page. The Hazard Summary Page displays the following:

- Product Name
- MSDS ID
- Manufacturer Name
- Synonyms
- Target Organs
- Routes of Entry
- Personal Protective Equipment (PPE)
- Manufacturer Emergency Phone
- Health Hazards
- Physical Hazards
- HMIS Rating
- NFPA Rating

NFPA Rating
 Hyperlink to NFPA Definition
 HMIS Rating
 Hyperlink to HMIS Definition

Product Hazard Summary

Product Name: APEX 1000
 MSDS ID: 2921
 Locations: Not provided on this Summary
 Manufacturer Name: ICI EXPLOSIVES USA INC.
 Synonyms: dynamite
 Emergency Phone: (800) 561-3636

NFPA Rating:

[Click Here for NFPA Definition](#)

HEALTH	2
FIRE	0
REACTIVITY	4
SPECIAL	GOGGLES

[Click Here for HMIS Definition](#)

PPE:
 Gloves
 Face Shield
 Goggles
 Respirator
 Apron

Routes of Entry:
 Inhalation
 Ingestion
 Skin Or Eye Contact
 Skin Absorption

Target Organs:
 Lungs
 Heart
 Kidney
 Eyes
 Skin
 Prostrate
 Blood
 Liver
 Central Nervous System
 Cardiovascular System
 Mucous Membranes
 Autonomic Nervous System
 Respiratory System
 Blood
 Mutagen
 Teratogen

Physical Hazards:
 No Physical Hazard
 Combustible Liquid
 Compressed Gas
 Oxidizer
 Explosive
 Pyrophoric
 Organic Peroxide
 Water Reactive

Health Hazards:
 No Hazard
 Toxic
 Highly Toxic
 Reproductive Toxin
 Corrosive
 Sensitizer
 Carcinogen
 Acute

Provider

MSDS Provider

MSDS Provider is a system that allows accessing the latest manufacturer's MSDSs including indexed safety and regulatory information. The system is searchable by product and/or manufacturer name. The system supports the multidocument feature application.

Search for a Provider MSDS:

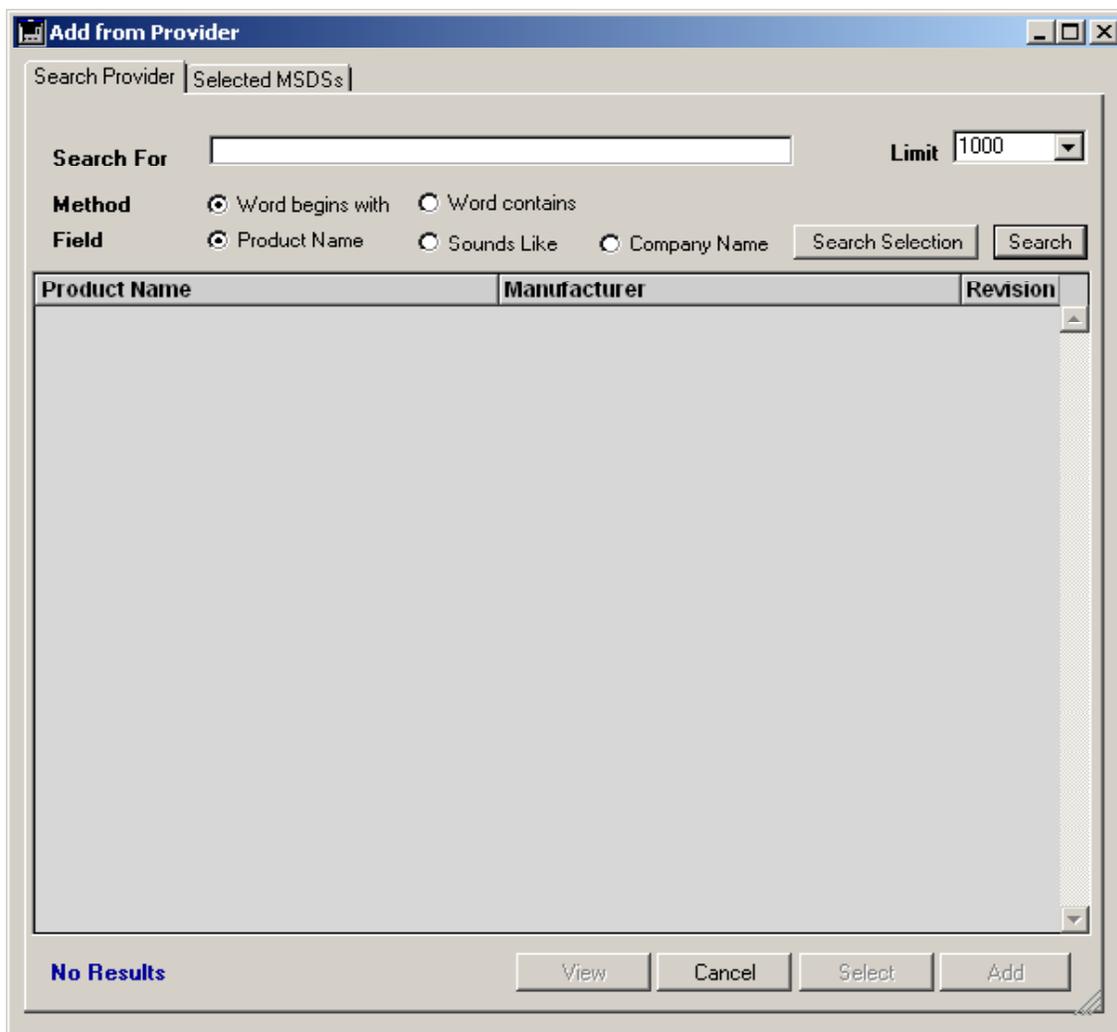
To search for and add a new MSDS from Provider, click the **Provider** Button in the Product Output form. The *Add from Provider Window* appears. The *Search For* Entry area is used to specify keywords used in the Product Name and Manufacturer search.

Method Choice allows a search that will find words in the Product Name that begin with the specified word or words that are contained within a larger word string.

NOTE: Choosing the Word Begins With is a much faster search than Word Contains.

The field choice allows a search for a Product Name that matches the Specified word(s) typed, or a search for Manufacturer Name that matches the specified word.

After Clicking **Search**, a resulting list of matches will appear. Using **SEARCH SELECTION** will narrow the search within the currently found records.



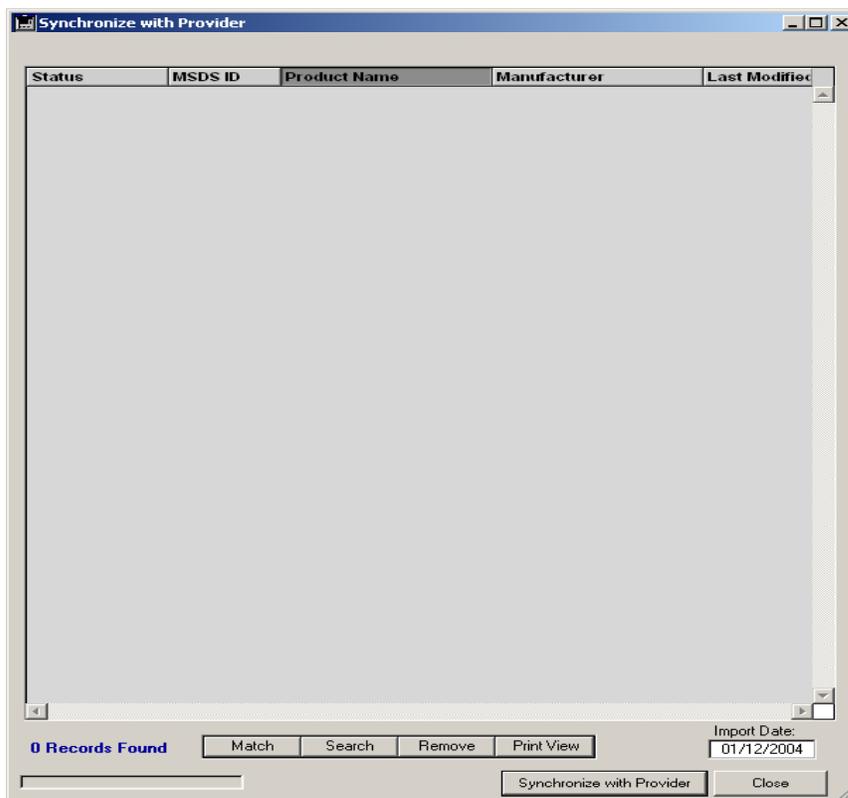
Provider - Cont'd

Add MSDSs from Provider

- Select any products you wish to add by highlighting them and clicking select.
- You can perform several searches and continue selecting products.
- After searches are done and MSDSs are selected, use the ADD button to add the selected MSDS(s) to your Database.

Synchronization with Provider:

- To synchronize your data with Provider select the *Synchronize with Provider* option from the Updates tab of the Admin Control Panel.
- The *Synchronize with Provider* form will be loaded. It contains a list of all MSDSs from you database with their statuses in relation to the Provider MSDSs.
- Match MSDSs with Provider MSDSs. Only documents with the status “Possible Match” can be linked to Provider. Select the MSDS and use the MATCH button to see the list of potential matches on Provider.



Document Status definition

- **Current** - The MSDS in your database is current.
- **Possible Match(es)** - There are possible Matches in Provider to the MSDS.
- **No Matches** - There are no matches to the MSDS in Provider.
- **Error linking Provider** - An error occurred during linking to Provider.
- **Provider Newer** - Provider has a more current version of this document.
- **Local Newer** - The local document is more current than Provider.

Provider - Cont'd

When matching local MSDS to Provider MSDS, use **VIEW CURRENT MSDS** and **VIEW PROVIDER MSDS** to view the respective documents. Select a provider MSDS to link the current MSDS to, and click **LINK TO THIS MSDS**. Click **LEAVED UNLINKED** if you don't want to link your document to Provider. Linked documents stay linked to Provider next time you synchronize. Unlinked documents can be linked the next time you synchronize. After an MSDS is linked to Provider its status will change to Current, Provider Newer or Local Newer.

- Synchronize with Provider by clicking SYNCHRONIZE WITH PROVIDER.
- Documents with Current, Local Newer, No Match or Error Linking Provider status will be ignored.
- Provider Newer Documents will be updated.
- Old Documents will be archived.

The screenshot shows a window titled "Synchronize with Provider" containing a table of MSDS matches. The table has five columns: Status, MSDS ID, Product Name, Manufacturer, and Last Modified. Below the table are several buttons: Match, Search, Remove, Print View, and a large Synchronize with Provider button. An Import Date field is set to 01/28/2004. A status bar at the bottom left indicates "47 Records Found".

Status	MSDS ID	Product Name	Manufacturer	Last Modified
Possible Matches	0004	ADHESIVE 404, QUICK SET	LOCTITE	01/26/99
Possible Matches	0012	JETWELD LH-70	LINCOLN	12/14/01
Possible Matches	0013	MAGNAGLO PREPARED BATH	MAGNAFLUX	06/06/02
Possible Matches	0009	HYDROCHLORIC ACID, CONCE	J.T. BAKER	11/12/01
Possible Matches	0007	FERRIC NITRATE	EM SCIENCE	09/28/00
Possible Matches	0009	HYDROCHLORIC ACID, CONCE	J.T. BAKER	11/12/01
Possible Matches	0015	PURPLE K	ANSUL	02/01/02
Possible Matches	0015	PURPLE K	ANSUL	00/00/00
Possible Matches	0016	PYROGALLIC ACID	MALLINCKRODT	11/02/01
Possible Matches	0016	PYROGALLIC ACID	MALLINCKRODT	11/02/01
Possible Matches	0016	PYROGALLIC ACID	MALLINCKRODT	00/00/00
Possible Matches	0011	ISOPROPYL ALCOHOL	MALLINCKRODT	01/14/02
Possible Matches	0004	ADHESIVE 404, QUICK SET	LOCTITE	00/00/00
Possible Matches	0011	ISOPROPYL ALCOHOL	MALLINCKRODT	01/14/02
Possible Matches	0018	SUPER BONDER 499 ADHESIV	LOCTITE	01/15/96
Possible Matches	0001	00321 AVIATION GASOLINE 1	TEXACO REFINING & MARKETI	12/10/96
Possible Matches	0020	TURBINE OIL ISO 32 TR	CHEVRON	07/01/00
Possible Matches	0022	WD-40, SPRAY	WD-40	03/01/02
Possible Matches	0022	WD-40, SPRAY	WD-40	03/01/01
Possible Matches	0021	UNOCAL MULTIPURPOSE ATF	PHILLIPS 66 COMPANY	01/01/02
Possible Matches	0022	WD-40, SPRAY	WD-40	03/01/01
Possible Matches	0023	WILLIAMS JET FUEL	WILLIAMS ALASKA PETROLEI	08/31/99
Possible Matches	0023	WILLIAMS JET FUEL	WILLIAMS ALASKA PETROLEI	08/31/99
Possible Matches	0022	WD-40, SPRAY	WD-40	05/01/02
Possible Matches	0023	WILLIAMS JET FUEL	WILLIAMS ALASKA PETROLEI	00/00/00
Possible Matches	0023	WILLIAMS JET FUEL	WILLIAMS ALASKA PETROLEI	00/00/00
Possible Matches	0023	WILLIAMS JET FUEL	WILLIAMS ALASKA PETROLEI	00/00/00

47 Records Found

Match Search Remove Print View

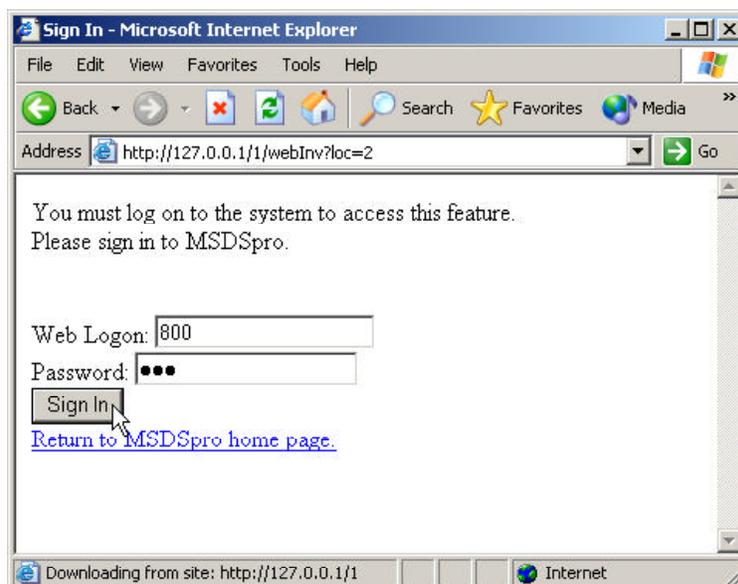
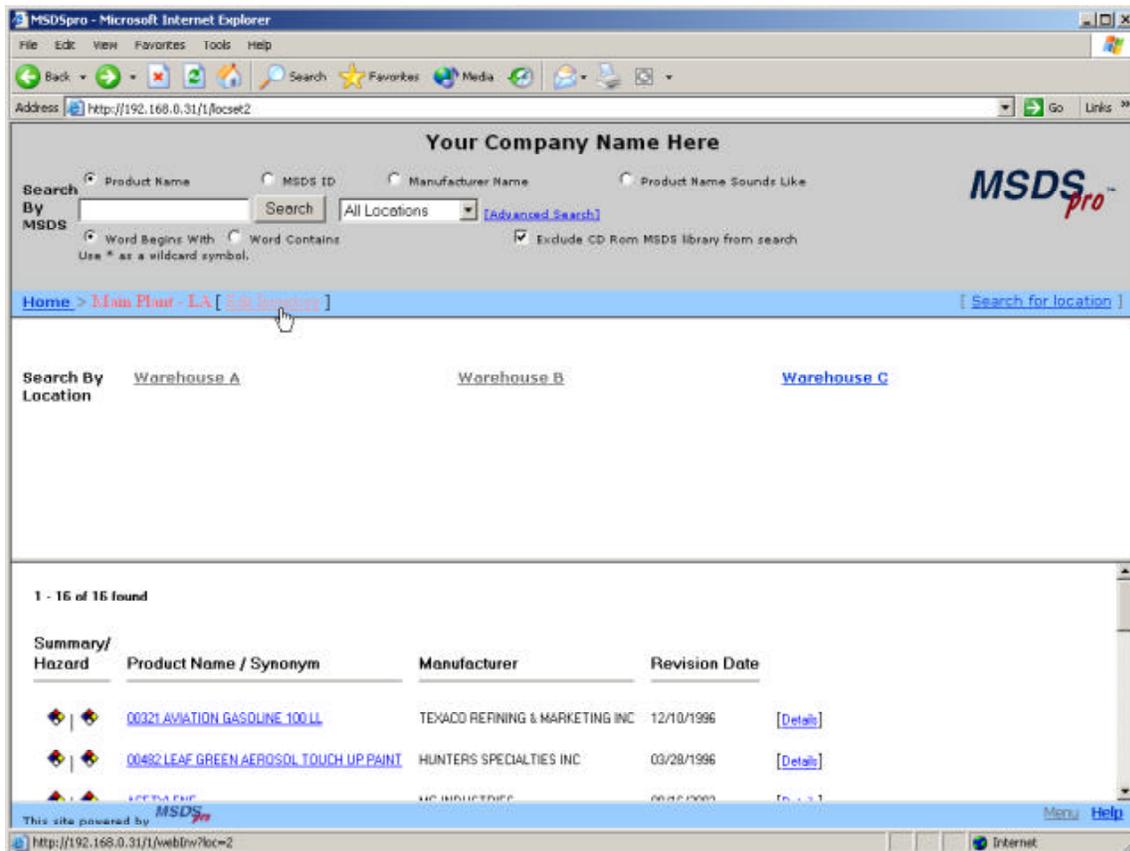
Import Date: 01/28/2004

Synchronize with Provider Close

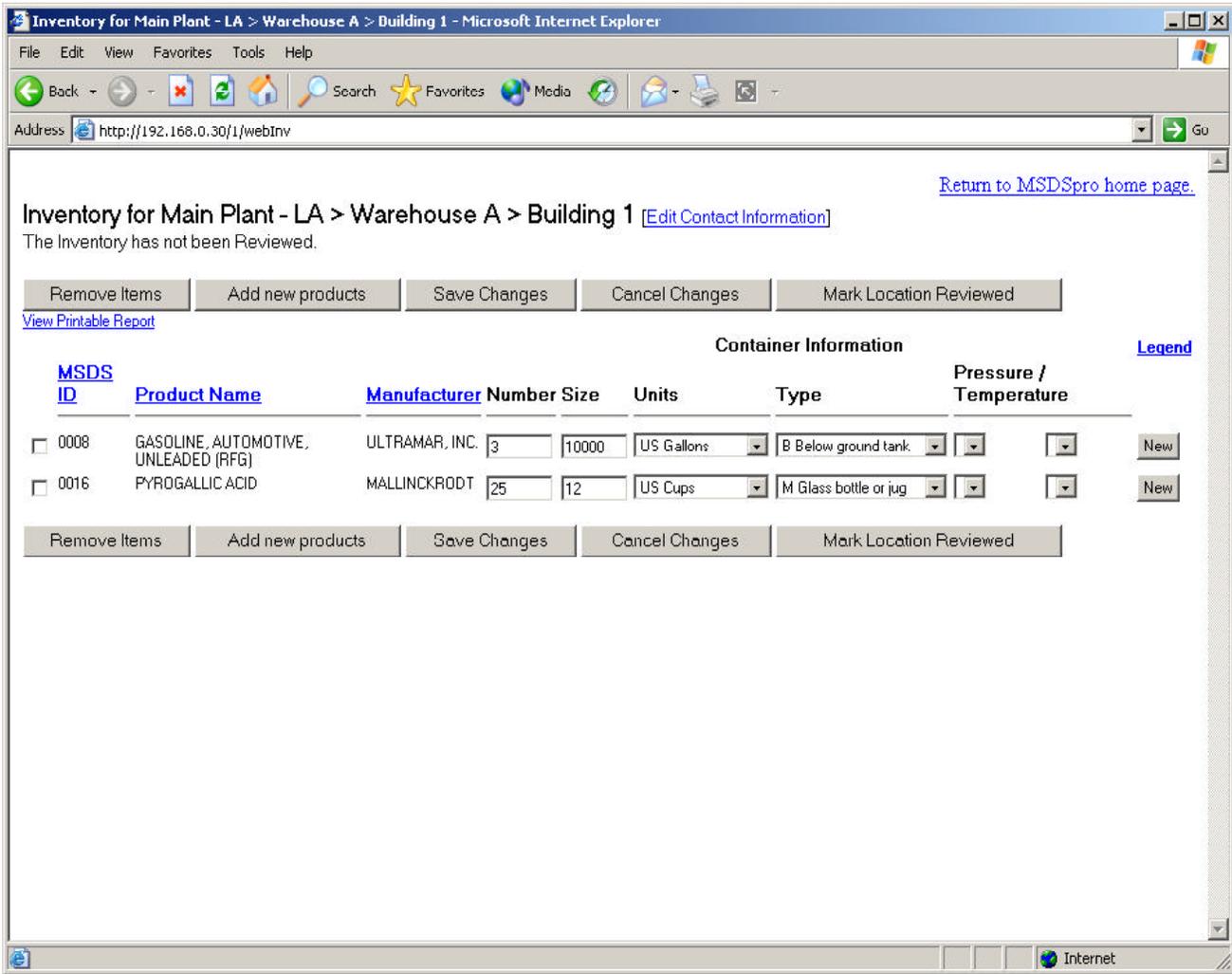
WIM - Web Inventory Management

To access the WIM capabilities, you must first enable the Web based inventory through the Web Server Control Panel. See Section 9-9 for instructions.

In the Web Browser open up a location that you wish to review, and select the **Edit Inventory** Link.



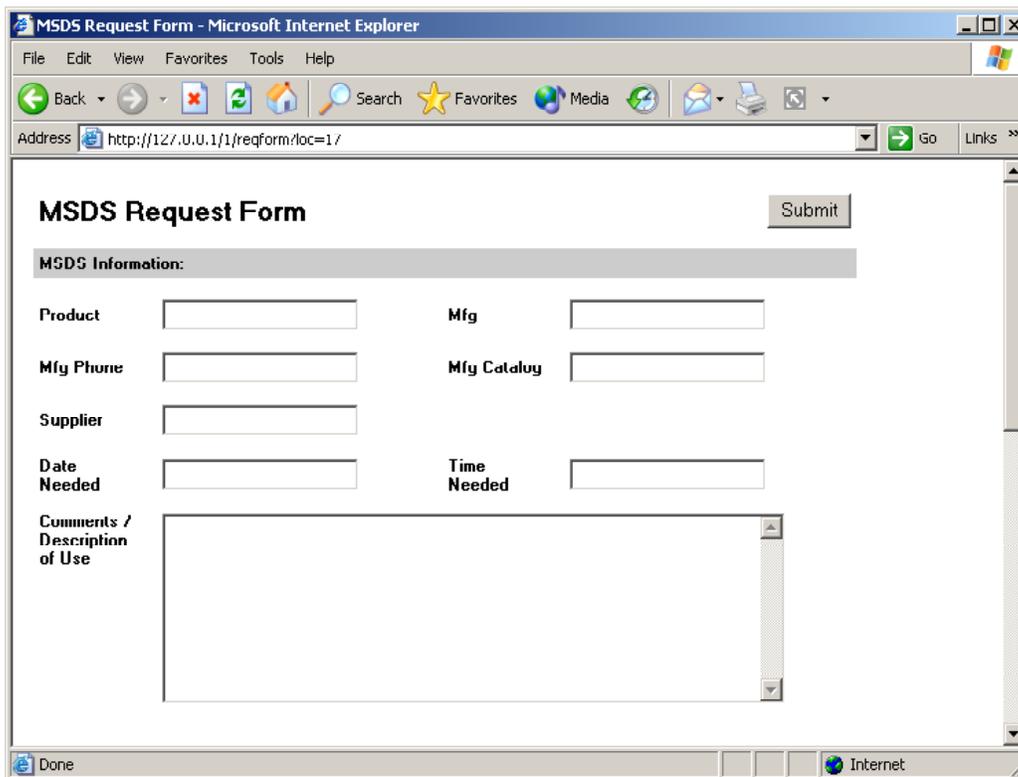
WIM - Web Inventory Management (cont'd)



- **Remove Items:** Items that have been selected will be removed from your inventory. Database setting determines if inventory is deleted or is the end date is set. See section 9-9.
- **Add New Products:** Go to screen for adding new products.
- **Save Changes:** Saves the changes that you have made to Inventory Information.
- **Cancel Changes:** Ignores any changes made to this page.
- **Mark Location Reviewed:** Records that all inventory has been updated and confirmed.

The MSDSpro Database Administrator has the capability to add or remove fields. See section 9-9 for instructions on configuring employees for web interface.

MSDS Request Form



Enter in as much information as possible for the MSDS you wish to have added to your location. The only fields that are required are noted with an astrix (*).

- **Product:** The name of the product to be added.
- **Mfg:** The Manufacturer of the product being requested,
- **Mfg Phone:** The contact number for the manufacture.
- **Mfg Catalog:** The catalog number for the product.
- **Supplier:** The supplier of the product being requested.
- **Time Needed:** The date the product is needed.
- **Comments/Description of Use:** Notes for the use of the product.

MSDS Request Form (cont'd)

Enter in as much information as possible for the MSDS you wish to have added to your location. The only fields that are required are noted with an astrix (*).

■ **Contact Information:**

- **Name:** The name of the person requesting the MSDS.
- **Department:** The department of the employee requesting the MSDS.
- **Location:** The location of the product being requested.
- **Phone/Address/City State or Providence:** The employee's contact information.
- **Postal Code:** Zip Code.
- **E-mail:** Employee's e-mail address.
- **Notes:** Additional information regarding the use and need for the MSDS requested.

MSDSpro Enterprise Integrated Backup

Overview

To keep your data safe, you should guard against hardware-related breakdowns and human error. MSDSpro Enterprise includes an integrated module designed for creating a backup of an MSDSpro database. This module is capable of backing up the MSDSpro database even while the database is open. The integrated backup module that comes with MSDSpro Enterprise is called 4D Backup. 4D Backup does not integrate with other versions of MSDSpro; PlusWeb, Classic, Web CD and CD Viewer.

Section ten of the MSDSpro Administrator's Guide explains how to install 4D Backup, backup an MSDSpro database and restore an MSDSpro database from a backup.

Installation of 4D Backup in MSDSpro Enterprise

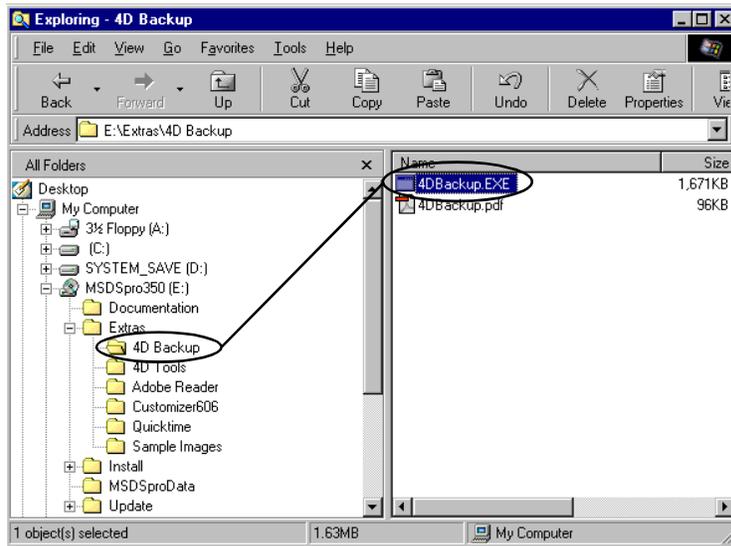
4D Backup must be installed on the same computer as MSDSpro 4D Server. Beginning with MSDSpro version 4.0, 4D Backup will automatically be installed with MSDSpro 4D Server. To install MSDSpro 4D Server, please refer to the section *Installation of MSDSpro 4D Server*.

To install 4D Backup in MSDSpro Enterprise, follow these steps:

- 1. Shut down MSDSpro 4D Server.**
- 2. Insert the MSDSpro CD into your CD-ROM drive.**
- 3. As shown on the next page, use Windows Explorer to browse to the \Extras\4D Backup folder on the MSDSpro CD.**

Installation of 4D Backup in MSDSpro Enterprise (Cont'd)

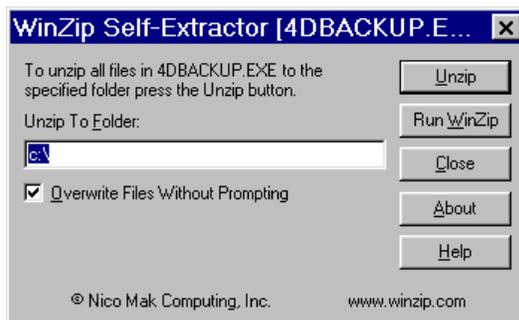
4. Double-click the 4DBackup.exe self-extracting file.



5. Verify the location to which 4D backup will extract.

To set the location to which 4D Backup will extract, type it in the Unzip To Folder field.

6. Click the UNZIP button.

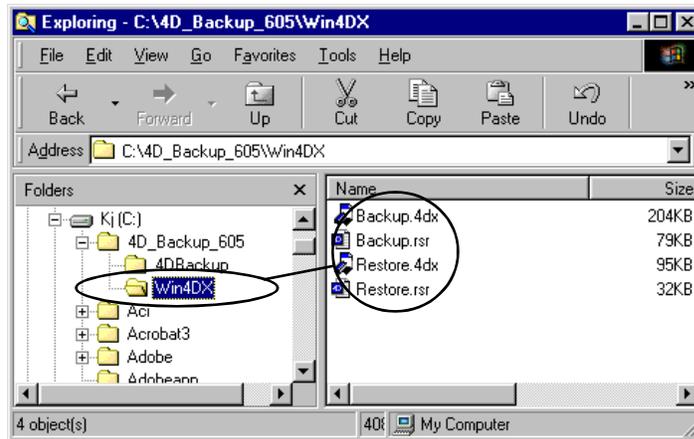


7. After file extraction is complete, click the OK button.
8. Click the CLOSE button to close the WinZip Self Extractor.

Installation of 4D Backup in MSDSpro Enterprise (Cont'd)

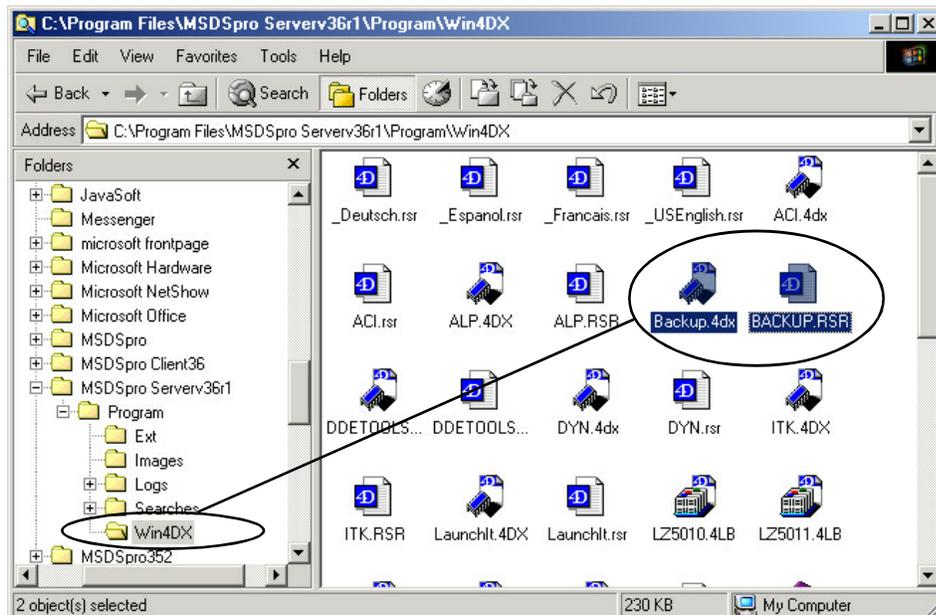
9. Locate the four files within the new *C:\4D_Backup_605\Win4DX* folder.

Changing the location to which **4DBackup.exe** extracted in step six will change the location of the Win4DX folder.



10. Move the Backup.4dx and Backup.rsr into the installed MSDSpro 4D Server Win4DX folder.

The default location of this folder is *C:\Program Files\MSDSpro Server\Program\Win4DX*.



Installation of 4D Backup in MSDSpro Enterprise (Cont'd)

11. Launch MSDSpro 4D Server.

Configuring 4D Backup

After installing 4D Backup and launching MSDSpro 4D Server, 4D Backup must be configured properly.

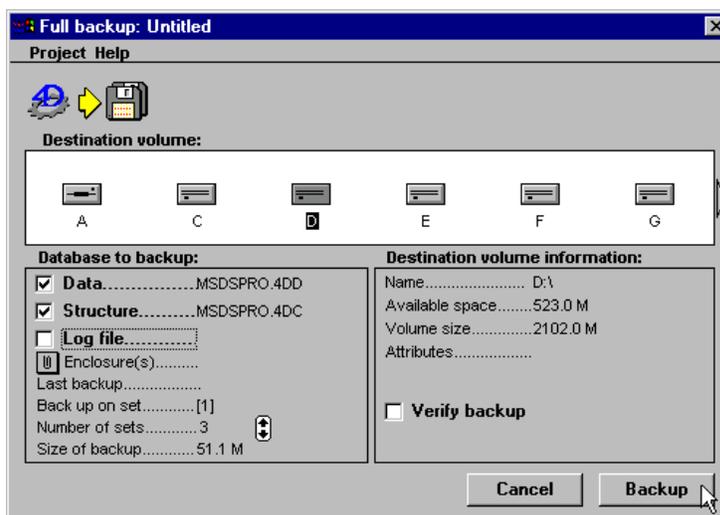
For the purposes of this guide, we will configure 4D Backup onto a fixed Hard Disk with 3 Backup Sets and a transaction Log File to store transactions.

Perform a Full Backup

1. Select *Full Backup...* from the *Backup* menu.



2. Select the destination volume by clicking on the hard disk icon.



Configuring 4D Backup in MSDSpro Enterprise (Cont'd)

3. **Verify that the destination volume will have enough free space to perform the backup.**

4. **Verify the number of sets.**

The number of sets indicates how many backups will be created before 4D Backup overwrites the earliest backup file.

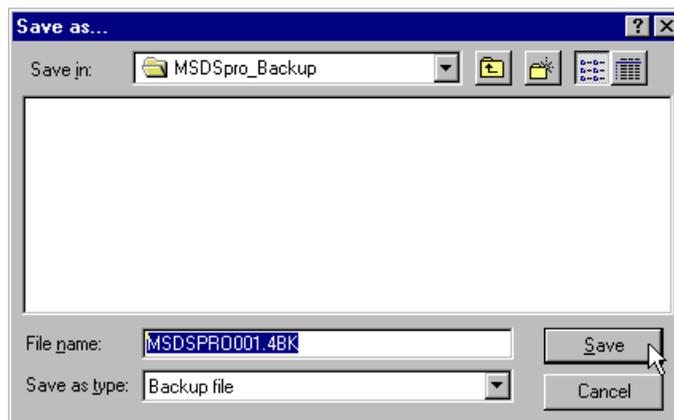
5. **Select whether 4D Backup should verify the backup when finished.**

Verifying will take additional time to ensure that the backup file was created successfully.

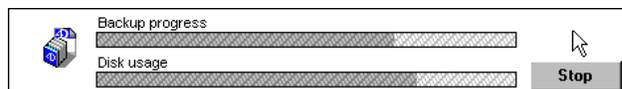
6. **Click the BACKUP button.**

7. **Save the backup file to the appropriate location.**

The first backup is named MSDSPRO001.4BK. Subsequent backups will be renamed incrementally.

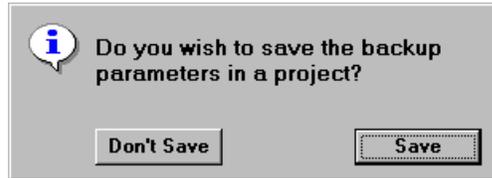


8. **The backup progress thermometer will appear.**



Configuring 4D Backup in MSDSpro Enterprise (Cont'd)

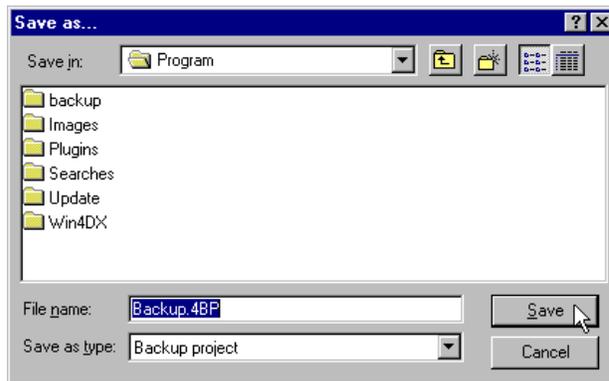
9. After the backup is complete, save the backup parameters.



10. Click the **SAVE** button.

11. Browse to the location to which the parameters will be saved and click the **SAVE** button.

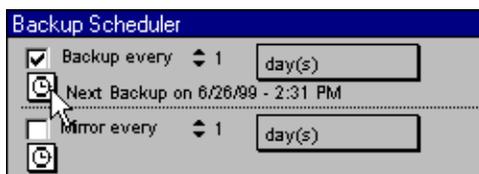
Note: The Project file **MUST** be saved in the same folder as the datafile (*.4DD) for scheduled backup to function properly.



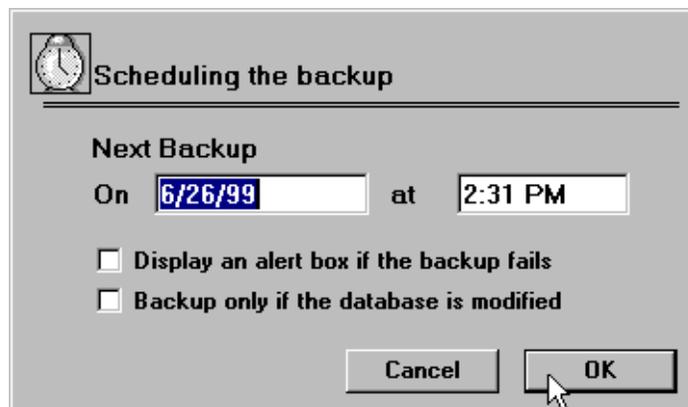
Configure the Backup Scheduler

The Backup Scheduler is used to specify when automatic backups should occur. These settings may be modified at any time.

1. Select the Backup Every checkbox.
2. Click the watch icon to configure settings.



3. Specify the next date and time 4D Backup should automatically execute.



4. Click the OK button.
5. Select the interval which regular backups should occur.

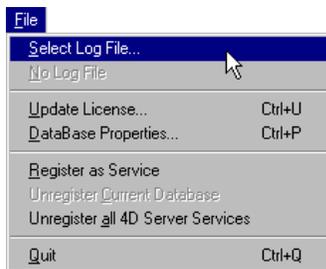


Configuring 4D Backup in MSDSpro Enterprise (Cont'd)

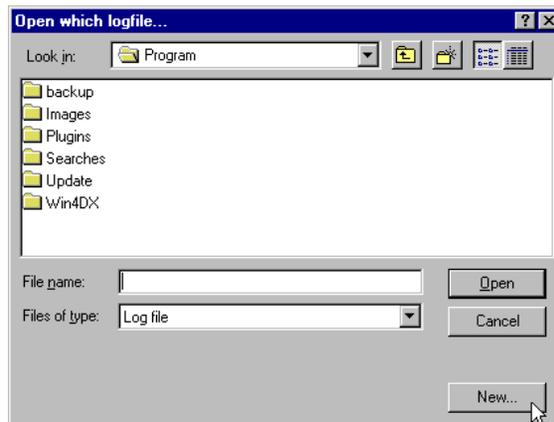
Select a log file

The log file is used to capture incremental changes to the database between backups. The log file can be used to recover records that have been added, modified, or deleted since the last full backup.

1. Select the **Select Log File...** menu item from the **File menu**.

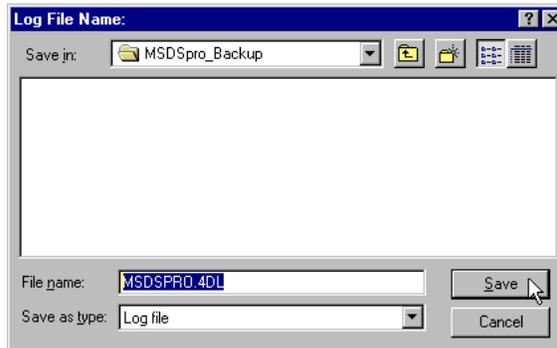


2. Click the **NEW** button to create a new log file.

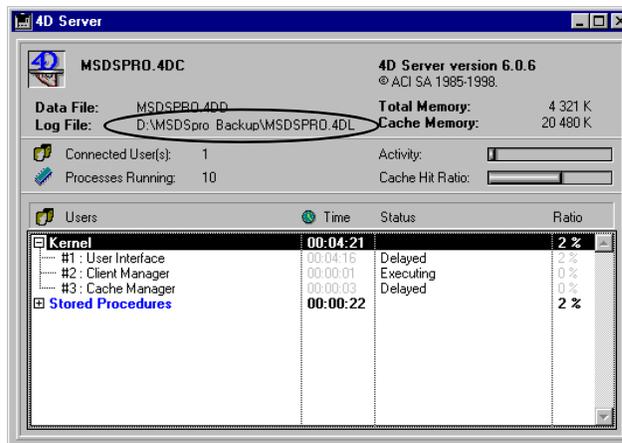


Configuring 4D Backup in MSDSpro Enterprise (Cont'd)

3. Save the new log file.



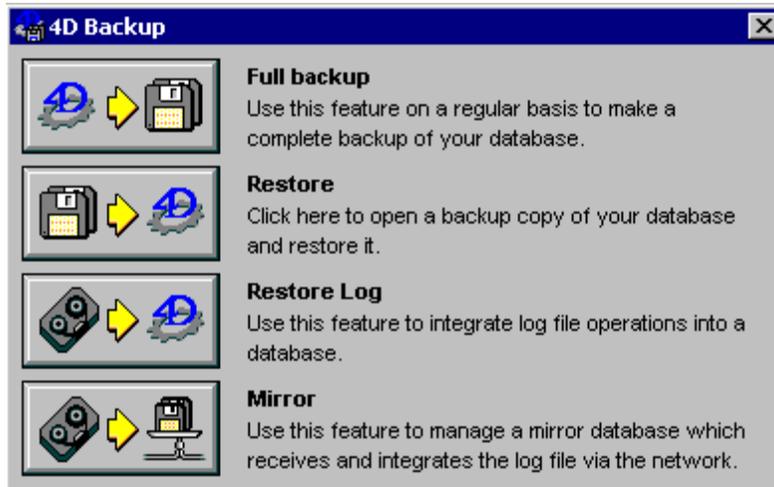
4. The 4D Server main window now shows the location of the log file.



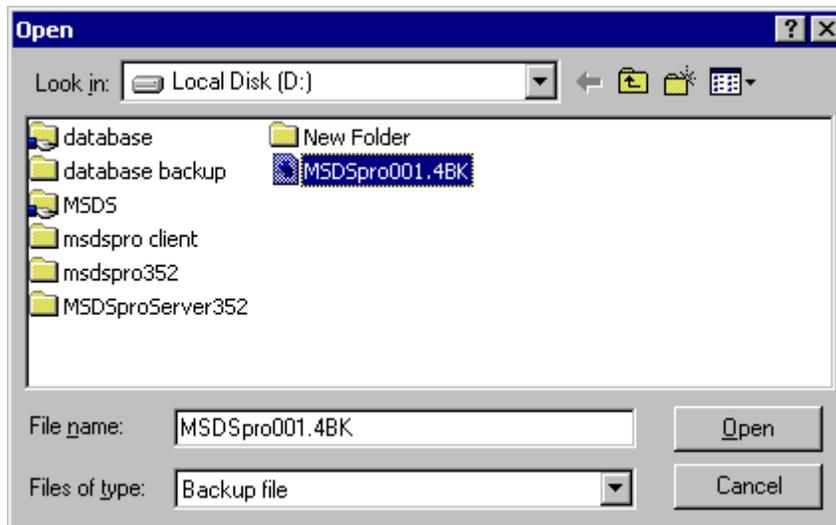
5. 4D Backup is now configured to automatically backup the MSDSpro datafile.

Restoring an MSDSpro datafile using 4D Backup

1. Launch 4D Backup.
2. Click on the RESTORE button.



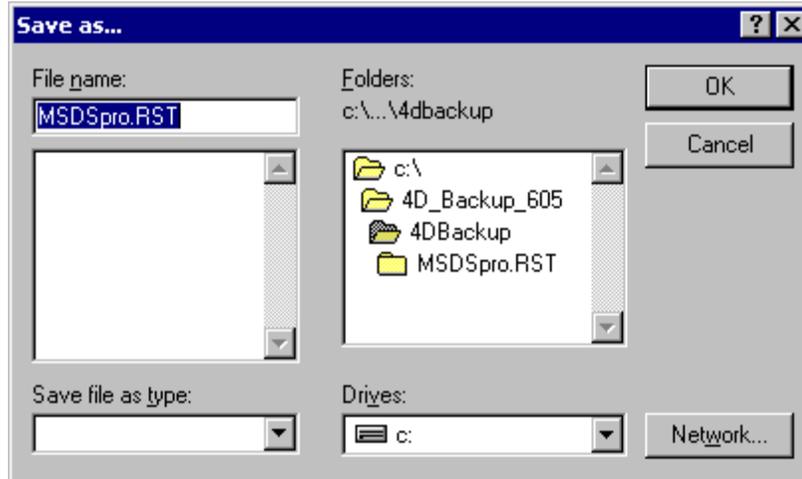
3. Browse to and open the backed up MSDSpro database file.



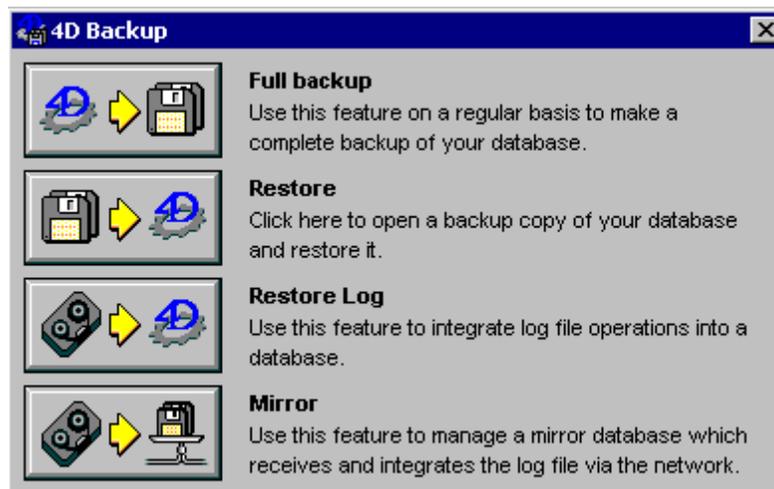
4. Click on the RESTORE button.

Restoring an MSDSpro datafile using 4D Backup (Cont'd)

5. Browse to the location to which the MSDSpro datafile will be restored.



6. A new folder named MSDSpro.RST will be created and the restored MSDSpro datafile placed inside.
7. Once the database has been successfully restored, 4D Backup will again display its main control panel.



8. The MSDSpro database has been successfully restored.

Additional Information

In summary, this section has shown how:

- **To install 4D Backup into the MSDSpro 4D Server**
- **To perform a full backup**
- **To schedule regular backups**
- **To create a log file to store incremental information between backups**

However, this guide contains excerpts from the full 4D Backup guide, which is provided as an all inclusive reference for 4D Backup installation, usage, and restoration techniques. MSDSpro will provide the full 4D Backup guide to you upon request.

Please contact MSDSpro as discussed in the section *Contacting MSDSpro* to request the full 4D Backup guide.

Compacting and Restoring the Database

Overview

Periodically it may become necessary to run a data compression or data recovery utility on the MSDSpro data files.

The utility provided for these tasks is called 4D Tools, and is provided on the MSDSpro installation CD-ROM or web site.

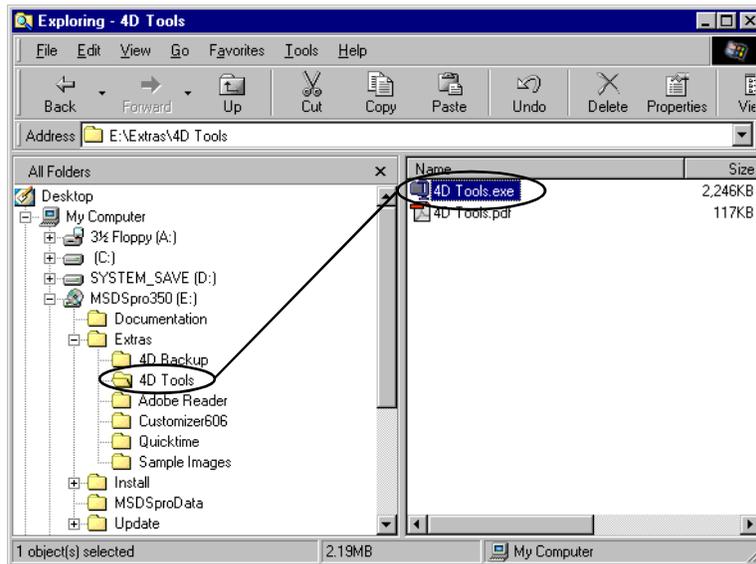
4D Tools can be used to compact the MSDSpro database files, which will remove deleted records and remove unused space which will normally tend to accumulate as the database is used. Compacting the MSDSpro database files is similar to defragmenting a hard disk - MSDSpro will take less space and will operate faster.

4D Tools can also be used to recover data in the unlikely event of a system crash. This will provide the best means of recovery if a reliable backup is not available.

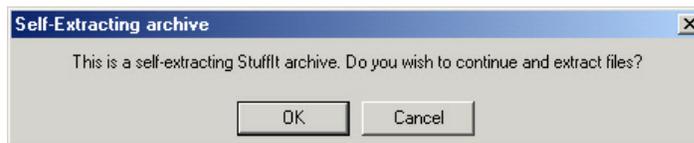
Installing 4D Tools

To Install 4D Tools, follow these steps:

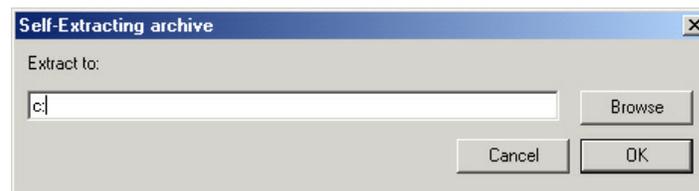
1. Insert the MSDSpro Installer CD into your CD-ROM drive.
2. Locate the `\Extras\4D Tools` folder as shown below in Explorer.
3. Double-click the `4D Tools.exe` application.



4. Click on the O.K. button.



5. Type the letter of the drive to which 4D Tools will extract, followed by the colon symbol. (ex. C:)



6. 4D Tools will now install.

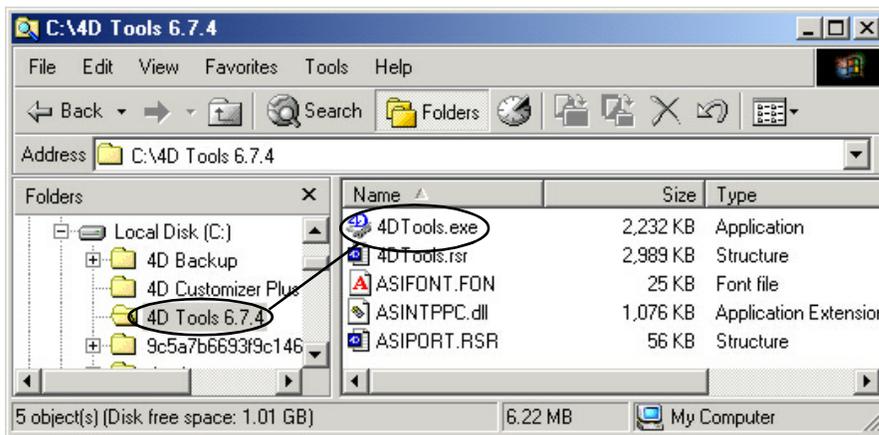
Compacting MSDSpro Using 4D Tools

NOTE: You must shut down the MSDSpro application currently in use. It's recommended that all file extensions are **VISIBLE** and **NOT HIDDEN**. This is accomplished from the Folder Options menu within Windows® Explorer. Select **View -> Options/Folder Options -> select Show all files and deselect Hide file extensions for known file types.**

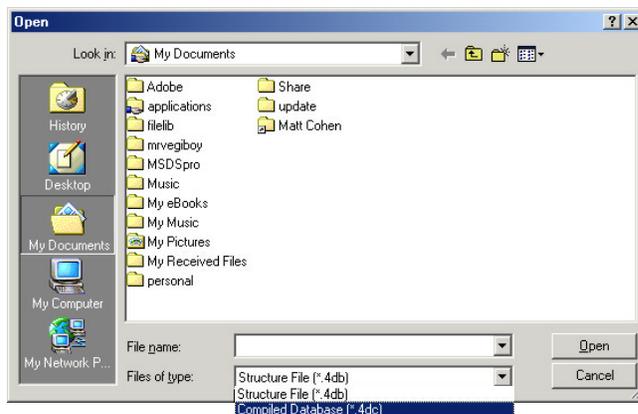
To compact the MSDSpro data files using 4D Tools, follow these steps:

1. Launch the 4DTools.exe application.

The default installation location is *C:\4D Tools\4DTools.exe*



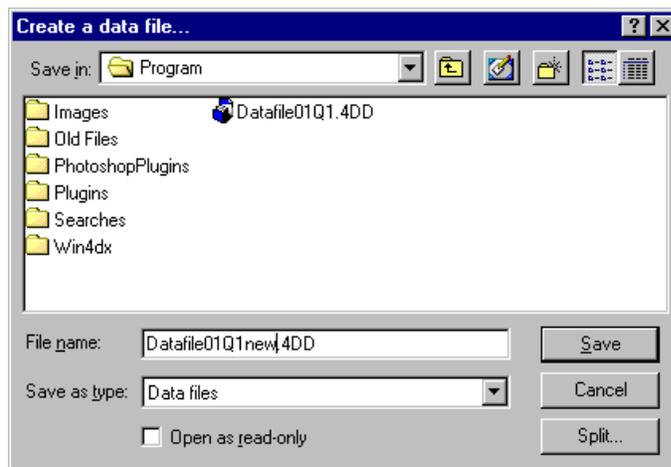
2. Change the Files of Type field to Compiled Database (*.4dc).



3. Select the MSDSpro.4DC file and click on the OPEN button.

Compacting MSDSpro Using 4D Tools (Cont'd)

4. Click on the *Maintain tab*.
5. Click on the **COMPACT** button.
6. Name the new datafile with “new” at the end of the file name.



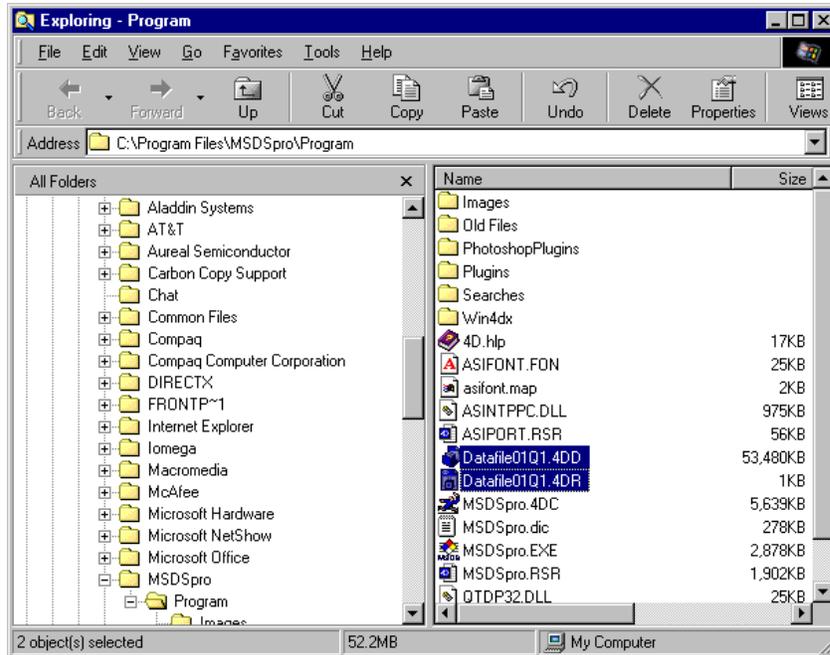
6. Click on the **SAVE** button.
7. 4D Tools will show the following progress thermometers during processing.



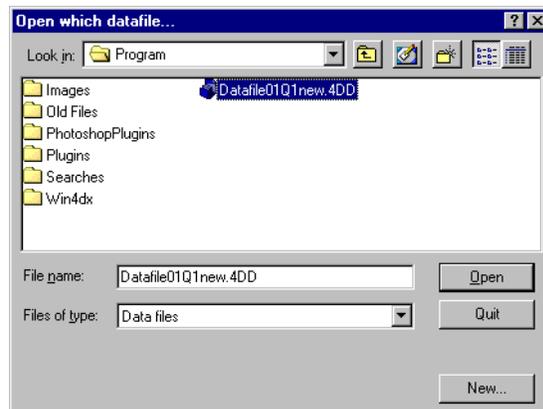
8. After 4D Tools has finished processing, select *Quit* from the *File menu*.

Compacting MSDSpro Using 4D Tools (Cont'd)

9. Locate the old (original) data files.
10. Create a new folder called "Old Files" from the *File menu -> New -> Folder*.
11. Move the old files into the new "Old Files" folder.



12. Launch MSDSpro and immediately hold down the ALT key.
13. Select the new compacted datafile when the *Open Datafile* window appears.



14. Click the OPEN button.

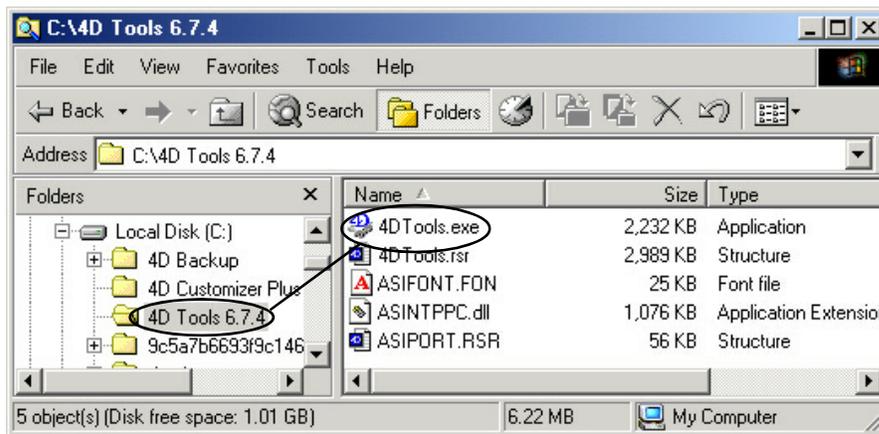
Recovering MSDSpro Using 4D Tools

NOTE: You must shut down the MSDSpro application currently in use. It's recommended that all file extensions are **VISIBLE** and **NOT HIDDEN**. This is accomplished from the Folder Options menu within Windows® Explorer. Select View -> Options/Folder Options -> select Show all files and deselect Hide file extensions for known file types.

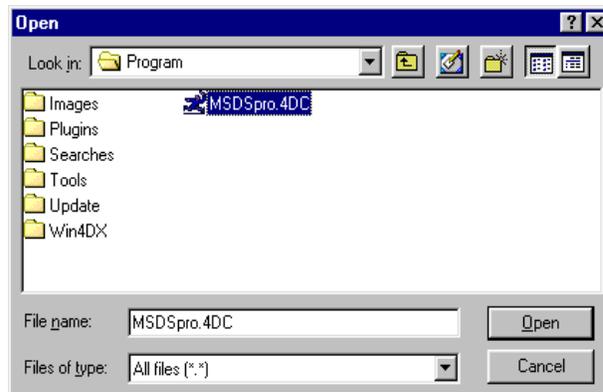
To recover the MSDSpro data files using 4D Tools, follow these steps:

1. Launch the 4DTools.exe application.

The default installation location is *C:\4D Tools\4DTools.exe*



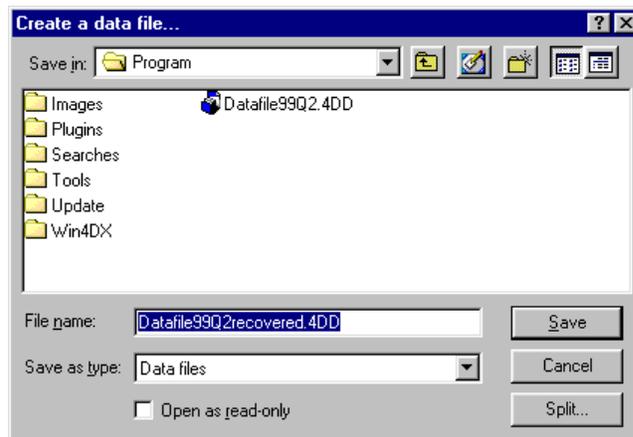
2. Select MSDSpro.4DC from the *Open File* window.



3. Click the **OPEN button.**

Recovering MSDSpro Using 4D Tools (Cont'd)

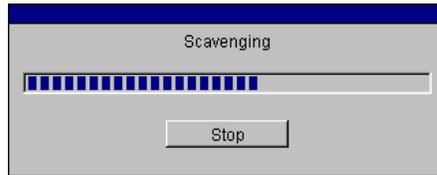
4. Click on the *Repair tab*.
5. Click on the RECOVER button.
6. Name the new datafile with “recovered” at the end of the file name.



8. Click the SAVE button.

Recovering MSDSpro Using 4D Tools (Cont'd)

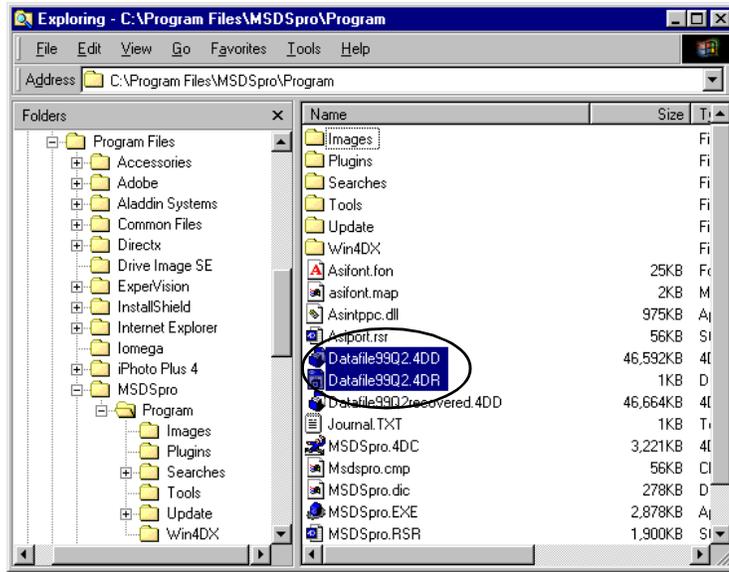
9. 4D Tools will show the following progress thermometers during processing.



10. After 4D Tools has finished processing, select *Quit* from the *File menu*.
11. Locate the old (original) data files.
12. Create a new folder called "Bad Files" from the *File menu* -> *New* -> *Folder*.

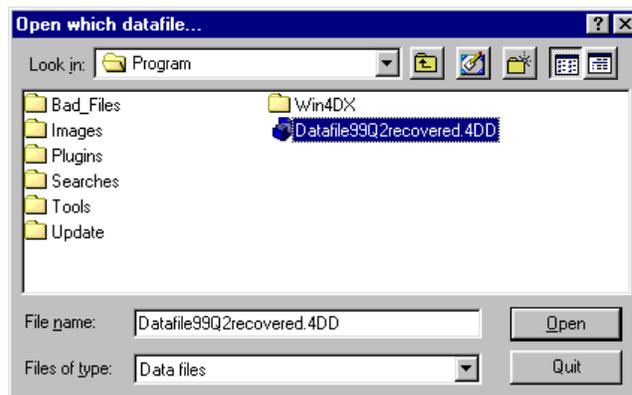
Recovering MSDSpro Using 4D Tools (Cont'd)

13. Move the old files into the new “Bad Files” folder.



14. Launch MSDSpro and hold down the ALT key at the same time.

15. Select the recovered datafile when the *Open Datafile* window appears.



16. Click the OPEN button.