



What's new in Chemgold II?

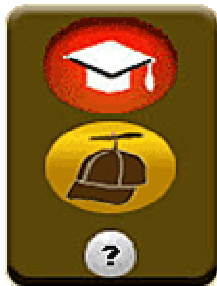
2005/3 Edition



Our Development team has been working tirelessly in developing new enhancements to the Chemgold II program. Such enhancements include:

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Simple and Advanced Mode



The Chemgold II interface is available in two modes. SIMPLE and ADVANCED. By default the program now opens in SIMPLE mode. ADVANCED mode behaves the same as any previous version of Chemgold II.

If you wish to change the default mode back to ADVANCED, click on the blue SetUp Icon at the top of your screen, choose MODE and select ADVANCED. From then on the program will always open in ADVANCED mode.

In SIMPLE mode (the icon of the hat with the propeller on the top) all activity is confined to one “simple” screen. It has been developed for novice users or users who are in a hurry.

The Search panel, Hit List screen and List screen icons all behave in the same way for both modes. The differences occur when the user clicks on a material name (blue link) or when the user selects the Manifest and Risk Assessment modules.

Manifest & Risk Assessment in Simple Mode



Selecting the Manifest or Risk Assessment buttons in Simple mode will display a pop up window with the list of available stores.

With Manifest turned on, selecting a store will display the materials inside that store.

MATERIAL	DGC	PKG	Max Vol
perchloric acid	5.1	I	90 L
hydrochloric acid	8	II	40 L
ammonia	8	III	8 L
DOMESTO CITRUS FRESH Citrus Fre	None	None	20 L

With Risk Assessment turned on, selecting a store will display the Risk Assessment Report for that particular store.

History Button in Simple Mode



History button shows a log of previously conducted searches. Select a material from the list to view the MSDS (Simple Mode) or to drill further into the MSDS & Labels screen (Advanced Mode.)

New MSDS Sections and HAC symbol.

One of the most popular features of the Chemwatch system has been the ability to selectively review different "sections" of an MSDS. This is done by clicking on SECTIONS from the MSDS & Labels screen and selecting the desired topic of interest from the list. ie. If a user wants to learn about storage requirements or if they want to view the ingredients for a material, they can simply click on the word "Storage" or "Ingredients" and only that information is displayed. The user does not need to learn which section (1-16) the information came from.

Now, we have extended this feature into our MSDS's. Once a MSDS is fully loaded, a sidebar appears. When the user moves their mouse over the sidebar, the list of topics pops out and the user can select the topic of interest.

The screenshot shows a Microsoft Internet Explorer window with the URL <http://www.chemwatch.net>. The page title is "Australian MSDS for FORMALDEHYDE". The main heading is "FORMALDEHYDE". In the top right corner, there is a red box with the text "HAC: EXTREME (Hazard Alert Code)". Below this, it says "Chemwatch 85016 CD 2005/3".

On the left side, there is a sidebar with a list of sections: 1 - Identification, 1 - Supplier, 1 - Use, 2 - Health Hazards, 3 - Ingredients, 4 - First Aid, 4 - Advice to Doctor, 5 - Fire Fighting, 6 - Spills / Accidents, 7 - Storage (highlighted), 8 - Exposure, 8 - Personal Protection, 9 - Physical Props, 10 - Reactivity, 11 - Toxicological, 12 - Ecological, 13 - Disposal, 14 - Transportation, 15 - Regulatory, 16 - Other Info.

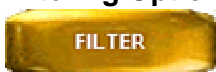
The main content area is titled "COMPANY IDENTIFICATION" and lists several suppliers:

- Company: Calbiochem Corporation Australia Pty Ltd
AUS Telephone: +61 2 9318 0322
- Company: Chem-Supply P/L
AUS Telephone: +61 2 8440 2000
- Company: Deltrex Chemicals Pty Ltd
- Company: Kendon Chemical & Manufacturing Co P/L
- Company: Merck Pty Limited (Bdh Chemical Aus. P/L)
AUS Emergency Tel: +61 3 9728 5855

At the bottom, there is a "HAZARD RATINGS" section with "Min" and "Max" labels.

By the way, MSDS's now load a section at a time allowing the user to read the MSDS while it is still loading! Also, the hazard stripe on the MSDSs are now replaced by colour coded section headings (red in above example.) A new **HAC** symbol has also been developed highlighting the level of hazard the material poses. In this case, the HAC symbol is RED: EXTREME.

Filtering Options when Searching for Materials



After conducting a search a list screen is generated and a gold “Filter” button appears on the left side of the screen beneath the “Documents” button. Selecting this button displays a list of categories:



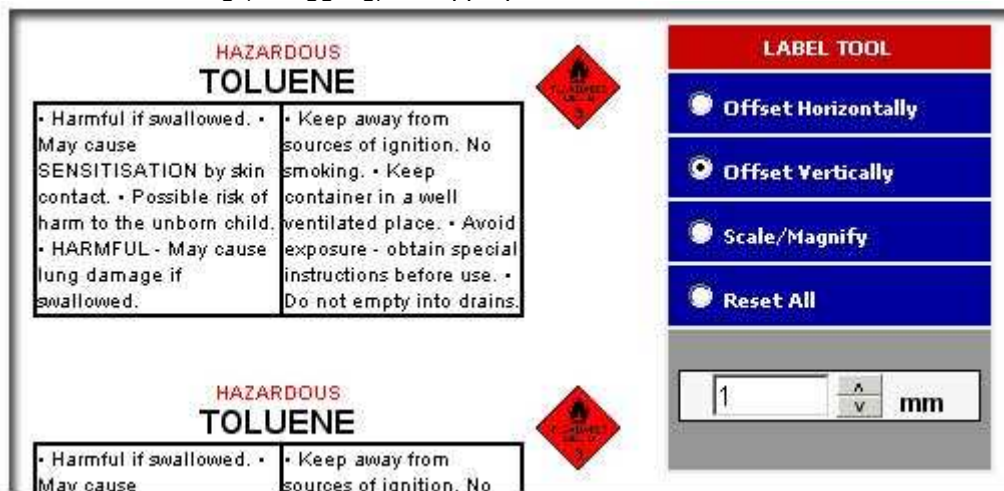
Clicking on **Hazardous** or **Dangerous** will only display the Hazardous Substances or Dangerous Goods from the list whereas clicking on **Either** will display both.

Clicking on **Non-Haz** displays the substances from the list that are Non Hazardous. This can be handy if you are looking for an alternative, Non Hazardous substance related to your search.

Label Printing Adjustments

Some exciting improvements to the prepared Chemwatch Labels and micro labels have been made. Using the label tool, the user can now make adjustments, and view them graphically as the change is made.

Labels can be adjusted horizontally and vertically, or scaled by selecting the appropriate radio button, and entering (or toggling) the appropriate measurements



NOTE: If labels still do not print correctly, select Page SetUp from your browser (eg. In Internet Explorer go to FILE > Page Setup.) Change the paper size to A4, delete any entries in the Header and Footer sections and change all margins back to zero. This will reset your page settings back to default. Restart Chemgold II and before you try printing labels again, select the “Reset All” radio button. See Appendix I for more information.

New Mini MSDS icons

We have developed a new series of icons to increase the readability of our MSDSs. These icons will also be used to create wall charts, posters and other safety sheets for all substances in the database.

WORK-PRACTICE DATA SHEET - THIS IS A SUMMARY ONLY - FULL REPORT AVAILABLE

Chemwatch 85016 - HAZARDOUS (OSHA) / DANGEROUS (EC) SUBSTANCE. - Company Contact No. +1 209 368 4031

FORMALDEHYDE

INGREDIENTS	CAS No	%	TWA
formaldehyde	50-00-0	37-50 *	1 ppm
formic acid	64-18-6	trace	5 ppm
methanol	67-56-1	2-7	200 ppm
water	7732-18-5	Balance	100 mg/m3

UN No: 2209
 Hazchem Code: 22
 DG Class: 8
 Subsidiary Risk: None

PRECAUTIONS FOR USE

Engineering Controls:
 Local Exhaust Ventilation recommended.

Glasses:
 Chemical goggles.
 Full face-shield.

Gloves:
 1.BUTYL 2.NEOPRENE/NATURAL 3.

Respirator:
 Type BAX-P Filter of sufficient capacity

Storage & Transport:
 Keep locked up.
 Keep container tightly closed.
 Keep container in a well ventilated place.
 Keep away from food, drink and animal feeding stuffs.
 Store in cool, dry, protected area.
 Restrictions on Storage apply. Refer to Full Report.

Fire/Explosion Hazard:
 Vapours/ gas heavier than air.

Environment:
 Harmful to aquatic organisms.

EMERGENCY

FIRST AID

Swallowed:
 Contact doctor or Poisons Centre.
 Give milk or water, then raw egg.
 Rinse mouth with plenty of water.

Eye:
 Wash with running water (15 mins). Medical attention.

Skin:
 Flood body with water. Remove contaminated clothing. Wash with water & soap. MEDICAL ATTENTION.

Inhaled:
 Fresh air. Rest, keep warm. If breathing shallow, give oxygen.

PROPERTIES

Liquid.
 Mixes with water.
 Corrosive.
 Toxic or noxious vapours/gas.
 Combustible.

HEALTH HAZARD INFORMATION

Acute Health Effects:
 Causes burns.
 Risk of serious damage to eyes.
 Toxic by inhalation, in contact with skin and if swallowed.
 Can be absorbed through skin.
 Vapours may cause dizziness or suffocation.

Chronic Health Effects:
 May cause SENSITISATION by skin contact.
 Limited evidence of a carcinogenic effect.
 Harmful; possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
 Possible respiratory sensitiser*.
 Cumulative effects may result following exposure*.
 * (limited evidence).

Manifest - Filtering and Sorting your list of materials



As with the list screen, selecting this button displays a list of categories. Clicking on an option will change the List to display only the items relevant to that category eg Dangerous Goods (by UN definitions, for Transport and Storage requirements), Hazardous Substances (significant Health Effects), or Non Hazardous. The category Either means either Hazardous or Dangerous (similar to European Dangerous Substances), so workplace information is required



The list of materials is originally in Dangerous Goods Class order. The sorting can be changed here to be alphabetical or in order from most to least hazardous. So, if you would like to print only the Dangerous Goods inside a site or store, click on **Filter** and select **Dangerous**. Only the Dangerous Goods will be displayed. Pressing the blue **Print** button on the Toolbar at the top of the screen will print that list of materials.

Manifest - Printing MSDS, Mini MSDS or Summary Reports for listed materials



Selecting the REPORTS button will display 3 options which will allow the MSDS, Mini MSDS or Summary reports to be printed for a list of displayed materials in this screen. The FILTER and SORT buttons can also be incorporated to bring extra flexibility to the list of reports that are printed.

The screenshot shows the "MANIFEST" software interface. At the top, there are navigation icons and buttons for "CLASSIFY", "MANIFEST", and "RISK ASSESSMENT". The main title "MANIFEST" is displayed in large yellow letters. Below the title, there are several buttons: "US TIER 2 SARA 302", "FILTER", "SORT", "REPORTS", "MSDS", "MINI MSDS", and "SUMMARY". The "REPORTS" button is highlighted in red. To the right of the buttons, there are hazard labels: "HAZCHEM 3WE", "TOXIC GAS 2", and "FLAMMABLE LIQUID 3". Below the buttons, there are three filter tabs: "Anti spying", "spying toolage", and "toolage time". The "spying toolage" tab is selected. Below the tabs, there is a table with the following columns: "MATERIAL", "DGC", "PKG", "Max Vol", and "LABEL MSDS". The table contains the following data:

MATERIAL	DGC	PKG	Max Vol	LABEL MSDS
LPG (liquefied petroleum gas)	2.1	I none	0 L	LABEL MSDS
chlorine	2.3	I none	144 L	LABEL MSDS
acetone	3	II	1744 L	LABEL MSDS
ethanol	3	II	0 L	LABEL MSDS
mek (METHYL ETHYL KETONE)	3	II	0 L	LABEL MSDS
toluene	3	II	20 L	LABEL MSDS

For example, if you wish to print the MINI MSDS for all Hazardous substances in your section, area, location, or entire organisation, select the appropriate store, select the FILTER button and select only the HAZARDOUS substances. Then select Reports, and Mini MSDS.

If you want to print reports in order of highest to lowest hazard, you can select the SORT option and chose HAZARDOUS. If you wanted the list of reports printed alphabetically, you would select ALPHABET from inside the SORT menu.

Classify Customised Mixtures and Print Micro Labels



For those of you who like to play with your chemistry sets, the Classify button in Chemgold 2 will now produce a set of risk phrases and a micro label for solutions prepared from ingredients on Chemwatch. See the Training workbook and Help Screen for details.

The screenshot shows the Chemgold 2 software interface. The main window displays a list of chemicals with their CAS numbers and percentages. A 'CLASSIFY' button is visible. A window titled 'http://www.chemwatch.net - ChemWatch - RiskCodes - Micros...' is open, showing a table of risk code definitions and a 'MY MIX LABEL' section.

RISK CODE DEFINITIONS	
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R36	Irritating to eyes.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R67	Vapours may cause drowsiness and dizziness.
R20/21/22?	Inhalation, skin contact and/or ingestion may produce health damage*.
R33?	Cumulative effects may result in more serious damage.
R36/37/38?	May produce discomfort of the aquatic life.
R67?	Vapours potentially cause drowsiness and dizziness.

MY MIX LABEL

- Toxic by inhalation, in contact with skin and if swallowed.
- Irritating to eyes.
- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
- Avoid contact with skin.
- Avoid contact with eyes.
- Wear eye/face protection.
- Use only in well ventilated areas.

In this example, a mixture of 30% Acetone and 70% methanol is analysed and corresponding micro label produced.

New Emergency Reports

Selecting the Emergency Icon from the hit list screen provides quick access to First Aid, Spills, Fire, Doctor and CHINA (Chemical Incidence Advisory) information.

In addition to these reports, Chemwatch has now included the ERG/IERG (Emergency Response Guide), CHRIS (Chemical Hazards Response Information System) and ERICards (Emergency Response Intervention Cards) in a variety of International languages.

Emergency

English (default)
Dutch
Spanish
French
Hungarian
German
Slovakian
Italian
Turkish

ChInA
ERG/IERG
CHRIS
ERICards

First Aid Spills Fire Fighting Doctor

Substance: ACETONE
UN Number: 1090
HIN: 33
ADR Label: 3
ADR Class: 3
Classification Code: F1
Packing Group: II
ERIC: 3-09

Emergency Response Information
HIGHLY FLAMMABLE LIQUID.

I. Characteristics.

- Gives off dangerous fumes.
- Flash point below 23°C.
- Hazardous to eyes and air passages.
- Miscible with water (more than 10%). OR heavier than water.

New Languages

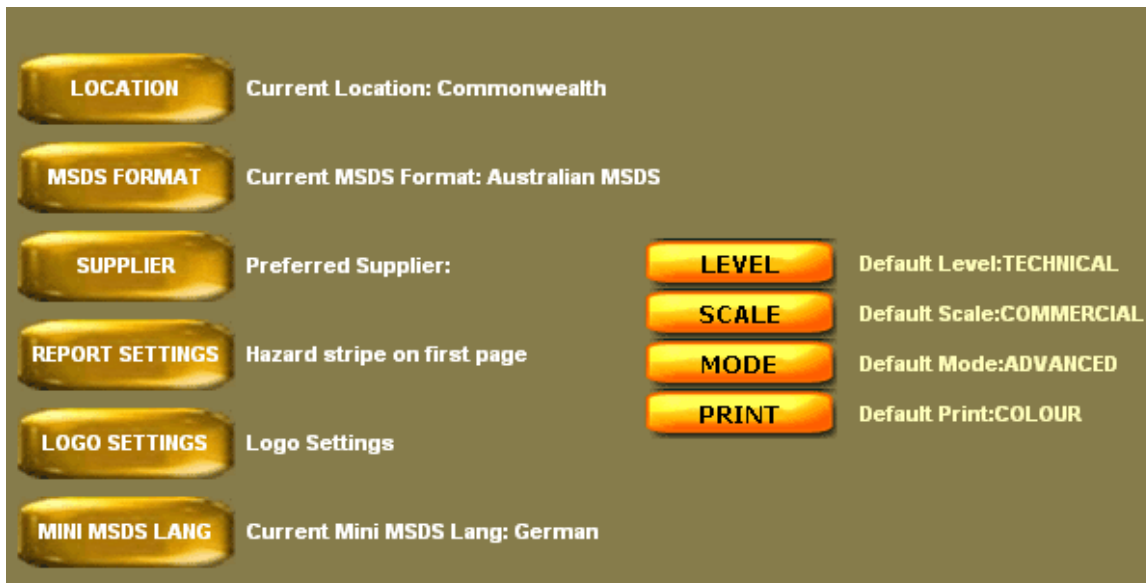
Chemwatch has progressed further in its endeavor to conquer the world. Portuguese, Vietnamese, Thai and Turkish MSDS's are now available. Mini MSDS's for Czech, Dutch, Lithuanian, Romanian, Norwegian, Polish and Latin have also been added. New languages have also been added to our user interface. The interface is now also available in Romanian, Lithuanian, Portuguese, Greek and Turkish.

We are also now distributing language specific versions of the Chemgold II package. Soon our Japanese, Chinese and Spanish users will receive a separate CD and password where the User Interface, MSDS formats, Help Screens and Interactive Movies are all set to the appropriate language by default. The default can still be changed at anytime by selecting the Setup icon in the blue navigation bar.

Additional Formats and Settings

Chemwatch has adopted the new Australian format for the MSDS based on the 16 part Globally Harmonized System format. This brings the MSDS into line with the International 16 part MSDS

The following screen can be viewed by clicking on the blue SETUP button on the toolbar:



For products used exclusively in the household, or available only in small quantities, an extensive Emergency Responder's section is not needed, nor is a section covering Major Spills. Therefore, the **SCALE** options allows Users to produce a 'Domestic' MSDS. Other options allow the production of Laboratory-scale as opposed to Commercial-scale MSDS.

The MSDS 'Level of comprehension' can also be selected by clicking on the **LEVEL** option. Eg 'Technical' users can select MSDS with 'Editorial' content which includes information description of pertinent recent research.

Selecting the **MODE** option will allow the user to change the default mode to SIMPLE or ADVANCED. Once the mode is set on this screen, anytime the user closes the program and reopens it, the default mode will be automatically selected.

Risk Assessment Control Banding



Chemwatch now offers a simplified technique for conducting Risk Assessments for processes that are based on specific tasks. It's called "**Task Specific Control Banding**". Control Banding was developed by the International Labour Office, (see <http://www.ilo.org/safework>). The theory is that each chemical is assigned to a **Band** for control measures based on its hazard classification, the amount of chemical in use and its volatility/dustiness (amount of exposure occurring).

Inside the module, templates describing common workplace processes involving chemicals are available for the user to choose from. e.g. These templates include processes involving Drum Storage, Spray Painting, Sack Filling, etc. The module takes you through the steps to do your own Task Specific Assessment and gain immediate recommendations in the form of ILO task sheets.

TASK							
Task Description: 1		Task Name: My New Tasks					
CHEMICAL NAME	R CODE	OP TEMP	VOLATILITY/DUSTINESS	SCALE	BAND	SKIN	
benzene	+	-100	Low	MEDIUM-Litres	4	N	
acetone	+	20	Medium	LARGE-Cubic Metres	2	Y	
	+	20					
	+	20					
	+	20					

Are materials to be discharged to: Air Water Land ? Submit

TASK SHEETS NEEDED					
CHEMICAL NAME	CONTROL	INHALATION	SKIN	ENVIRONMENT	SAFETY
benzene	400			E300	
acetone	205	R100	Sk100	E300	

Save Print All

Since a task may include exposure to a number of chemicals, these materials can be added and the appropriate scale of use can be selected. Upon pressing Submit, appropriate ILO Task sheets specific to the task are then available in underlined links alongside each material name. See the online help screens for more information.

Previous Chemgold II Enhancements

New Interfaces

The interfaces have been completely redesigned for those who are more comfortable with the traditional Windows interface. It includes a new navigation and menu toolbar.

Tool Bar

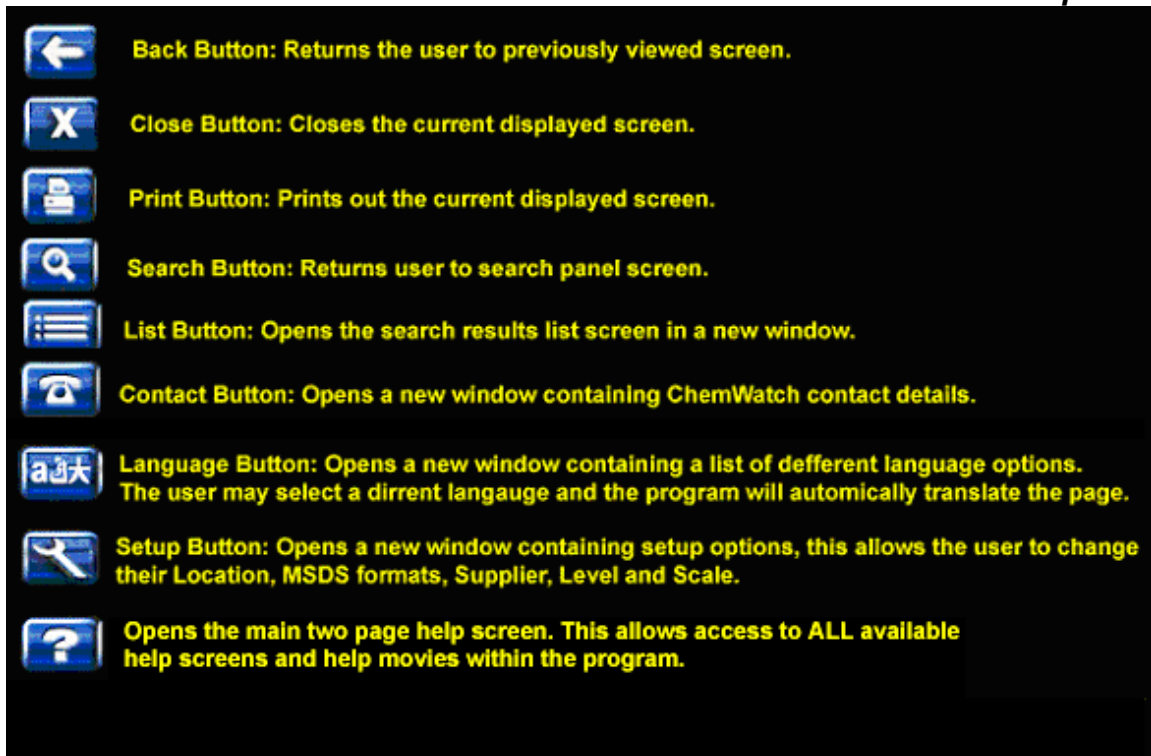
Module Buttons






Menu Buttons

Search Panel



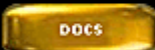
Help Icon




Module Buttons

	Classify* Enter materials, volumes and percentages for a new compound. The module will calculate & classify the risk.
	Manifest* This module allows the user to create a manifest reflecting the contents and quantity of dangerous goods in a store. Store placarding, security options and a vast array of reports are also provided.
	Risk Assessment* Displays all previously created stores, allowing the user to go through a step by step process to calculate the risks involved in using and storing specific materials within locations.

Menu Buttons

	FAQ Links to a Frequently Asked Questions page, displaying commonly asked questions and detailed answers for each.
	Bulletin Board Bulletin board contains details of new developments in the field of health and safety. Updates are provided weekly and with each update of the database.
	Documents Displays a menu of document titles. Documents include training workbooks, technical manuals, the latest "What's new in Chemgold II" article and the current issue of the ChemWatch newsletter in PDF format.

Context Sensitive help and Interactive Help Tutorials

Each screen now displays several question marks . These link directly to specific help screens for that area. Interactive animated Help movies are also available on these screens and can be accessed by clicking on the title "Play Movie".

The movies capture screen movements and prompt the user to perform certain actions, which then produce animated results.

They have been developed as animated GIFs and do not require Flash or other such utilities to display them.

List Screen Icons

Now along side each chemical in the list screen are four icons.



Displays a gallery of templates for printing labels (see Custom Labels/Gallery below). Users can also access the Mini MSDS from this screen.



Locates all the stores in which this material is found, and allows you to add it to new stores.



Displays Emergency Information for this material



Views the Collection of Suppliers' Original MSDS. MSDS may be selected and placed into personal folders (See Links to Collection below).

Supplier Searches

Users may now search on a Supplier to determine the full range of products produced by the Supplier (for which MSDS are available) or refine the search to find whether a particular Supplier produces a particular product (Advanced Search option).

Links to Collection

Search list incorporates links to a new supplier's MSDS module. Any MSDS which comprises part of The Collection and which finds a counterpart in the existing Chemwatch package is now matched to its counterpart.

Users may:

- Identify the supplier(s) MSDS of interest, from The Collection
- Advise Chemwatch of this interest – using new software shipped with ChemGold II
- Automatically receive email alerts when the subject MSDS is updated or replaced
- Create personalized *folders*, containing Suppliers' MSDS, on Chemwatch Servers (located world-wide) and may mirror these on their own Server(s) or PCs

The Collection has now grown to 1.5 million MSDS and continues to expand at a great rate.

Tools-Driven Functionality

A series of on-screen tools have been developed to assist in performing certain repetitive functions (such as adding materials into Stores). Each tool comes with its own on-board Help screen and mouse over captions.



G)HSNO

New Zealand has introduced new legislation requiring suppliers to evaluate their materials under HSNO Rules. These are a modified set of Rules produced under the Globally Harmonized System (GHS) that will soon be implemented throughout Europe.

Chemwatch has now produced a new document, the (G)HSNOTICE which we believe complies with the GHS classification and New Zealand HSNO requirements. The document is currently located on the mini-MSDS sub-menu.

Supplier



Clicking on the Supplier button displays contact information for Suppliers of the product from the Chemwatch database. You can get Supplier contact details, select a specific supplier from the Chemwatch Suppliers, add your own details for this material only (Local Supplier) or use the one address for all materials (Preferred Supplier.)

Supplier information can be altered and will appear on the Full Report, MSDS, Labels and Mini MSDS.

New Alerts when adding materials to Stores

Where materials to be stored create compatibility problems or where volumes exceed certain pre-set limits, ChemGold II produces an alert (as an animated alarm).

Stores Displays – Tree/Flat Mode

The identification and display of Stores or Workplaces belonging to a particular organisation has been improved. Displays are now available in tree or flat format. Each has its own advantages. Tree displays allow for enhanced navigation, while flat displays allow us to provide greater amounts of detail regarding the contents and characteristics of the Store.

New Manifest Reports



Hot Spots functionality has been implemented and now identifies stores and work places which carry excessive amounts of hazardous or dangerous materials.

The Conflicts report highlights Chemical Incompatibilities within Stores based on international (UN) rules relating to Dangerous Goods, eg it is prohibited to store Oxidising Agents and Flammable Liquids together in other than minor quantities.

Refined More powerful Search Engine

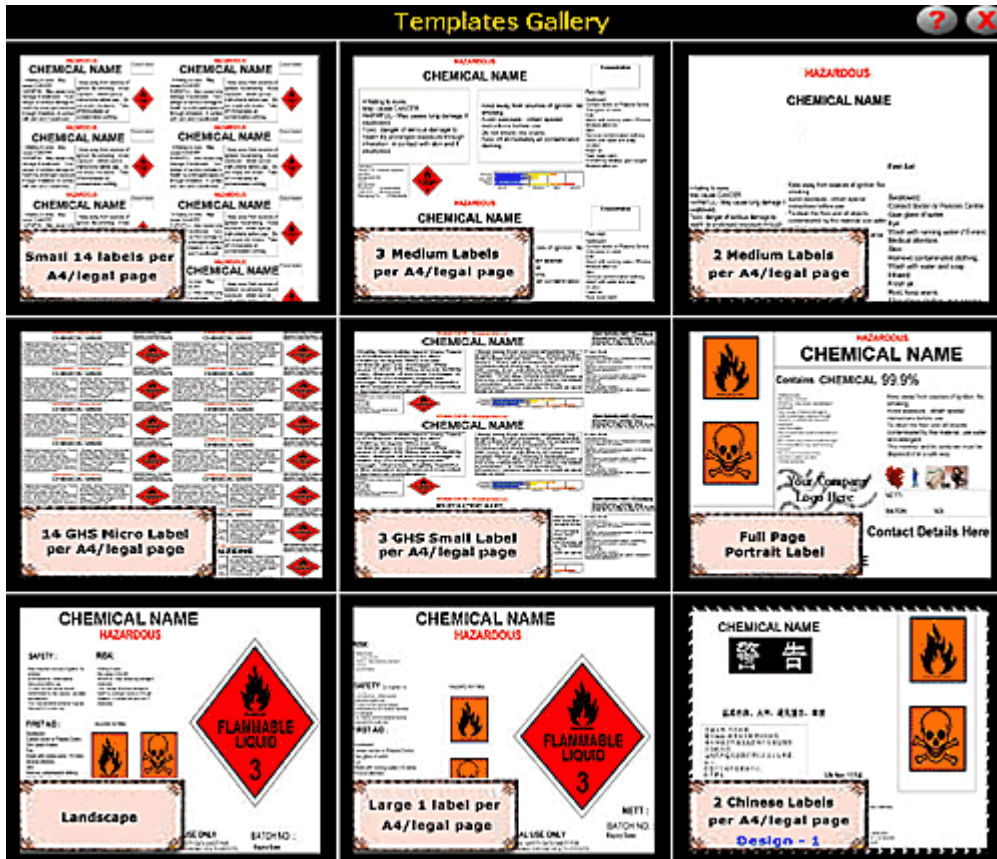
Search speeds have greatly improved and the concept of a fuzzy search has been implemented. These combine to return a greater number of hits where the search term(s) are imprecise.

Searches on Molecular Structures have also become much faster.

New search criteria, including EINECS number, have been added. In addition, an Advanced Search option allows the User to perform additional searches on an existing Hit List.



Label Template Gallery



Legs and Regs

The Regulatory Affairs Officers, of many companies, show a vital interest in whether all Ingredients, in any product the company produces or uses, have not been included on the so-called National Inventory for a particular country.

The new Legs and Regs button now produces such information for all National Inventories throughout the world

Appendix I – Changing and Restoring Printer Settings

As discussed earlier, in order to print labels correctly it may be necessary to remove the header and footer information from your web printouts. If you would like to restore this information, you can do so by following the instructions below:

This is an excerpt from Microsoft Internet Explorer Help Screen.

To change how a Web page looks when it prints

1. On the **File** menu, click **Page Setup**.
2. In the **Margins** boxes, type the margin measurements in inches.
3. Under **Orientation**, click either **Portrait** or **Landscape** to specify whether you want the page printed vertically or horizontally.
4. In the **Header** and **Footer** boxes, specify the information to be printed by using the following variables. Variables can be combined with text (for example, Page &p of &P).

	To print this	Type this
Window title		&w
Page address (URL)		&u
Date in short format (as specified by Regional and Language Options in Control Panel)		&d
Date in long format (as specified by Regional and Language Options in Control Panel)		&D
Time in the format specified by Regional and Language Options in Control Panel		&t
Time in 24-hour format		&T
Current page number		&p
Total number of pages		&P
Right-aligned text (following &b)		&b
Centered text (between &b&b)		&b&b
A single ampersand (&)		&&

- If you want to set margins in millimeters instead of inches, you must change the Regional and Language Options in Control Panel.