

The Combined Chemical Dictionary is a structured database that contains information on chemical substances. It includes descriptive and numerical data on chemical, physical, and biological properties of compounds; systematic and common names of compounds; literature references; and structure diagrams and associated connection tables.

Access the Combined Chemical Dictionary at: <http://ccd.chemnetbase.com>

An online tour is available at <http://ccd.chemnetbase.com/tour/index.jsp>
Additional help is located at <http://ccd.chemnetbase.com/help/index.jsp?sec=0:28&id=29>
Introductory information is available at: <http://ccd.chemnetbase.com/intro/index.jsp>

The online version of the *Combined Chemical Dictionary* contains all compounds published in the:

- *Dictionary of Commonly Cited Compounds*: <http://www.chemnetbase.com/scripts/dcccweb.exe>
- *Dictionary of Drugs*: <http://dod.chemnetbase.com/>
- *Dictionary of Inorganic and Organometallic Compound*: <http://dioc.chemnetbase.com/>
- *Dictionary of Natural Products*: <http://dnp.chemnetbase.com>
- *Dictionary of Organic Compounds*: <http://doc.chemnetbase.com>

These dictionaries may be searched separately by accessing them at the above links, or search them all together through CHEMnetBASE: <http://ccd.chemnetbase.com>

Compounds covered include:

- fundamental organic and inorganic compounds of simple structure
- virtually every known natural product
- all currently marketed drugs, including all those listed in generic name compilations, as well as those undergoing clinical trials
- compounds with an established use, such as catalysts, solvents, synthetic reagents, analytical reagents, etc.
- important co-ordination compounds, such as amines, phosphines, alkoxy complexes, and major well-characterized bioinorganics
- organometallic compounds representative of all important structural types
- important biochemicals and minerals
- other compounds of particular interest because of their chemical, structural, or biological properties

Searching the *Combined Chemical Dictionary*

1. Go to <http://ccd.chemnetbase.com>
2. Enter search terms related to criteria such as chemical names, CAS Registry No., or other physical or chemical properties in the appropriate search box(es).
3. Select the desired operators (**AND**, **OR**, or **NOT**) using the drop-down menus located to the right of the search categories and then click the **Search** button at the bottom of the search forms, or press **Enter**.

Results will appear in a brief, tabular format. For complete information on a specific chemical, click on the linked name of the chemical.

Customize the results view by clicking on the **Columns ...** button. Select the field(s) of interest, click the single right arrow and then click **OK**.

To view the structure of the compound and to enable the structure drawing feature, you will need to download the structure plug-in.

1. Click the **Get the Plug-in** link from the left menu bar and follow the download instructions to view structures and to enable the structure drawing and uploading feature.

If you have downloaded the plug-in feature, you can click the Structure Icon  or link to view the structure of a compound.

Search Tips

- Dashes, spaces, and commas count when typing chemical names.
Example: **2,4,6-Trinitrophenol** (no spaces between commas, and a dash after the last number, no space) will retrieve information on this compound. Any variation in the spacing, commas, or dashes will not retrieve the correct records.
- Molecular formulas must be entered in **Hill Order** (i.e., carbons must be arranged first, hydrogens second (if present), and all other elements after that in alphabetical order). **Example:** C₈H₁₈, C₂Ag₂N₈, C₉H₈Cl₄N₈O. If no carbons are present, the elements should be placed in alphabetical order,
Example: CeO₂, Cl₆S_b, ClNa
- Searches in the **Molecular Formula** field are case sensitive.
- Browseable indexes are available for all fields.
 - To use the indexes, click the **Browse** link next to the desired field. Type in term of interest and click **Go**.
 - Click the term of interest. This term will automatically appear in the search box on the **Search** page.
- Use an asterisk (*) to truncate on the left or right side of the word.
Example: ***theobrom*** will retrieve **Methyltheobromine**, etc.
- Use a question mark (?) as a wildcard to replace one character only.
Example: **Sul??er** will retrieve **sulfur** and **sulphur**.
- The *Combined Chemical Dictionary* uses British spellings of words. You may need to use both for full retrieval: For example: **sulphur, aluminium**, etc.

Structure Searching

In order to perform a structure search, you must first download the plug-in feature. Click the **Get Plug-in** link from the left menu bar if you have not already done so.

1. From the search screen, click the **Draw Query** button to display the structure drawing screen. For assistance with creating a structure, click **Help** from the menu bar in the **Structure Drawing** screen, and then click **Index**.
2. When your query is completed, click the green arrow to add your structure to the search query.
3. Use the drop down menu to choose either **Substructure** or **Exact Match** and then click **Search**.

Printing/Downloading

Use your browser's print or save features for either operation. You may want to save the document as a text file by changing the **Save as type** option to **text file**. However, the structure will not appear in the text file.

Exporting

You can export results into Microsoft Excel, Text, HTML or XML documents:

1. In the brief view, use the **Columns** button to select the fields you would like to include in your export.
2. Click the **Export As** button and select the export format from the drop-down menu and then click **Export**.

Create a Custom Workspace:

A Custom Workspace allows you to save, copy and maintain your searches and to modify how (or whether) you receive notifications from *Combined Chemical Dictionary*.

Use the **Register** link on the left of the screen to set up an account. Once you have registered, you can:

- Save searches to your custom workspace: Go to **My Searches** and then click the **New Search** button. Name your search and click **Save**. You can then start working on your new search. The **My Searches** screen will also let you view, copy or delete your saved searches.
- Notifications: Go to **My Account**. Under **Notification Settings**, you can opt to receive notifications of changes and updates to *Combined Chemical Dictionary*, and in what format you would like to receive the notifications. You can add a **New Notification** and add another email address for notification.

CHEMnetBASE provides access to information on chemistry, medicine, materials science, and physics from a variety of major reference sources. The Hanford Technical Library's subscription includes:

- The *CRC Handbook of Chemistry and Physics* <http://www.hbcnetbase.com/>
- *Polymers: A Property Database* <http://www.polymersdatabase.com/>
- *Properties of Organic Compounds* <http://www.chemnetbase.com/scripts/pocweb.exe>