

USER GUIDE

CHEMnetBASE

CHEMICAL DATABASES ONLINE

INCLUDES:

CRC Handbook of Chemistry and Physics Online
The Combined Chemical Dictionary
Dictionary of Natural Products
And more

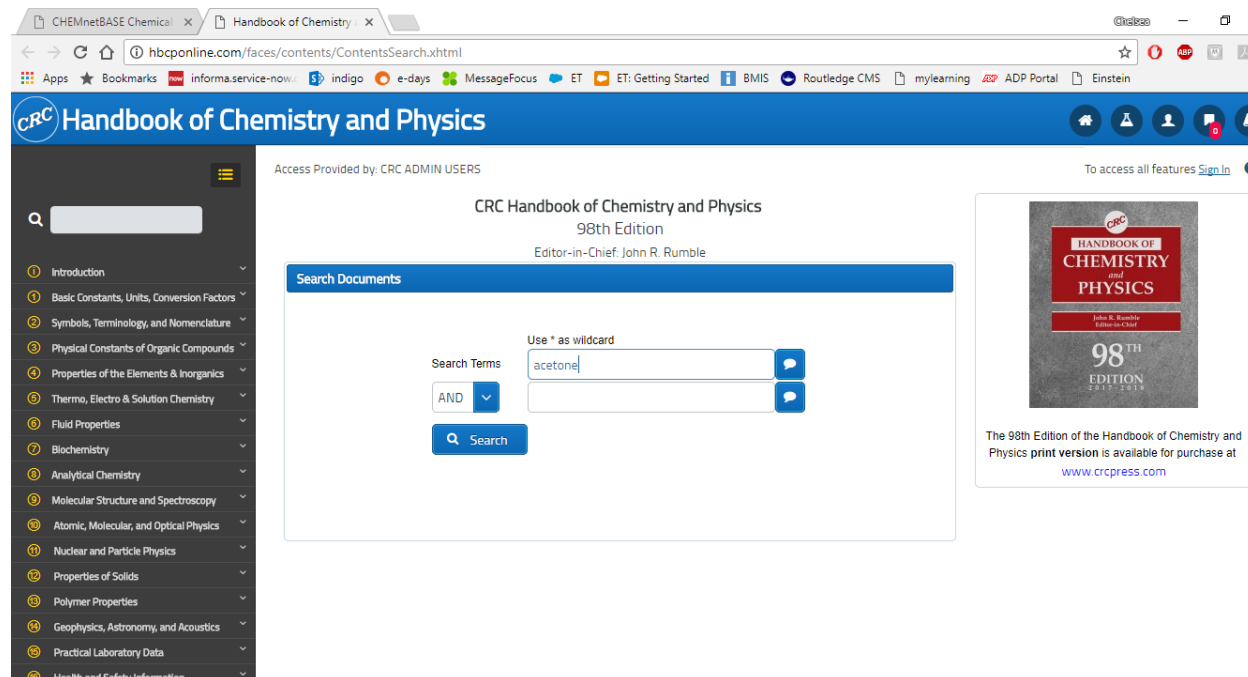
"A powerful site
for all chemists"

– CHOICE

In Handbook of Chemistry of Physics

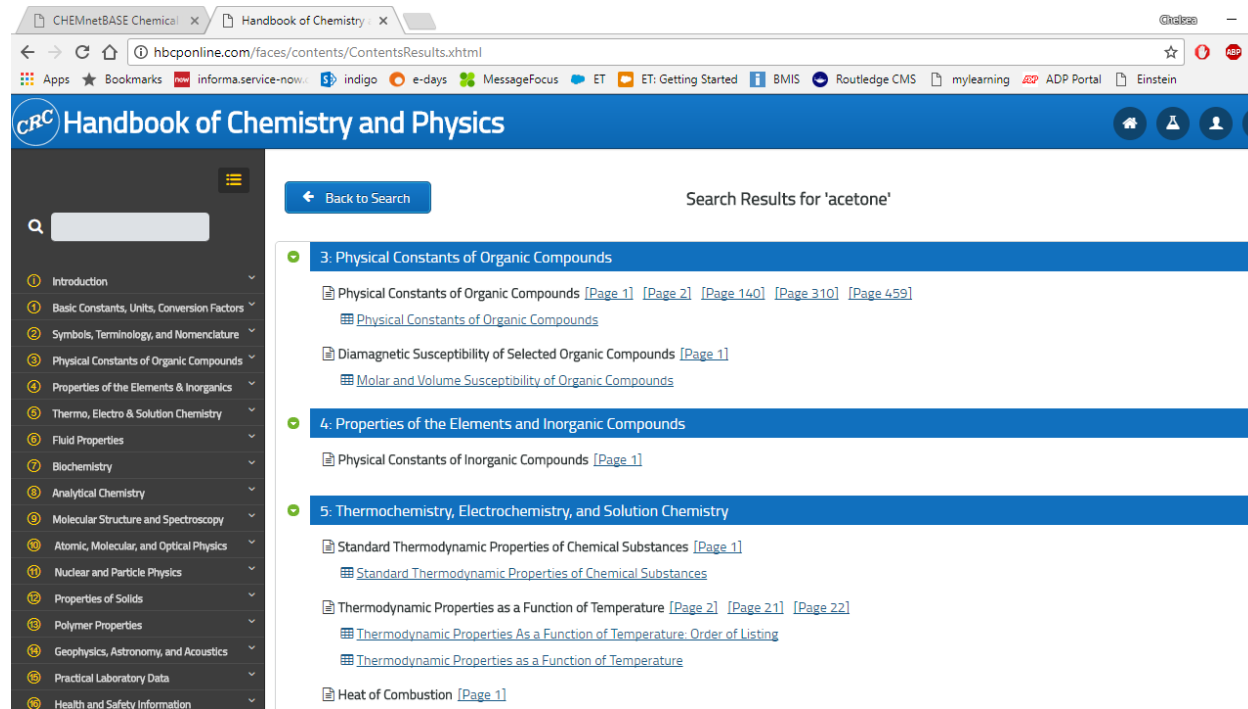
Perform a Simple Search

- Type in “Acetone”; press Search:



The screenshot shows the search interface of the CRC Handbook of Chemistry and Physics. The search bar contains the text "acetone". Below the search bar, there is a "Search" button. The page title is "CRC Handbook of Chemistry and Physics 98th Edition". The editor-in-chief is listed as John R. Rumble. The page also features a navigation menu on the left and a promotional banner for the 98th edition on the right.

- This will produce your search results; these are all the tables where the word “acetone” appears:



The screenshot shows the search results page for the search term "acetone". The results are organized by section, with the following sections highlighted:

- 3: Physical Constants of Organic Compounds**
 - Physical Constants of Organic Compounds [Page 1] [Page 2] [Page 140] [Page 310] [Page 459]
 - Physical Constants of Organic Compounds
 - Diamagnetic Susceptibility of Selected Organic Compounds [Page 1]
 - Molar and Volume Susceptibility of Organic Compounds
- 4: Properties of the Elements and Inorganic Compounds**
 - Physical Constants of Inorganic Compounds [Page 1]
- 5: Thermochemistry, Electrochemistry, and Solution Chemistry**
 - Standard Thermodynamic Properties of Chemical Substances [Page 1]
 - Standard Thermodynamic Properties of Chemical Substances
 - Thermodynamic Properties as a Function of Temperature [Page 2] [Page 21] [Page 22]
 - Thermodynamic Properties As a Function of Temperature: Order of Listing
 - Thermodynamic Properties as a Function of Temperature
 - Heat of Combustion [Page 1]

- The search results are organized by section; the tables that are shown are also organized by section
- Click on Acetone:

hbcpnline.com/faces/contents/InteractiveTable.xhtml?tableId=148&search=true

Handbook of Chemistry and Physics

Results from Document Search: acetone | [Show All Rows](#) Section: 3 | Document: Diamagnetic Susceptibility of Selected Organic Compounds

Interactive Table: Molar and Volume Susceptibility of Organic Compounds

(1 of 1) Go to page: 1 Rows per page: 15

Select	Row	Name	Synonym	Mol. form.	CAS Reg. No.	Mol. wt.	$\chi_m/10^{-6} \text{ cm}^3 \text{ mol}^{-1}$	$-k/10^{-6}$
<input type="checkbox"/>	7	Acetone	2-Propanone	C ₃ H ₆ O	67-64-1	58.079	33.8	0.457

(1 of 1) Go to page: 1 Rows per page: 15

Other ChemNetBase Products

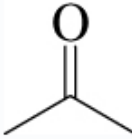
- Combined Chemical Dictionary
- Dictionary of Inorganic and Organometallic Compounds
- Polymers: A Property Database
- Dictionary of Natural Products
- Dictionary of Commonly Cited Compounds
- Properties of Organic Compounds
- Dictionary of Organic Compounds
- Dictionary of Marine Natural Products
- Dictionary of Drugs
- Dictionary of Food Compounds

About

- If you click on Acetone itself, it will bring up all the existing information on Acetone across all the tables:

Entry

Entry Name: Acetone



Synonym: 2-Propanone

CRC Number: HBCP 21433

CAS Registry Number(s): 67-64-1

Molecular Formula: C₃H₆O

Formula: (CH₃)₂CO

Molecular Weight: 58.079

Melting Point: -94.9(4) °C

Boiling Point: 56.08(7) °C

Density: ρ^{20} 0.7902 g cm⁻³

Refractive Index: n_D^{20} 1.3588 (at 589 nm)

Autoignition Temperature: 465 °C

Critical Pressure: 4.7(1) MPa

Critical Temperature: 508.1(2) K

- It will also tell you all other tables where Acetone can be found:

Entry

additional data may be found in these tables.

This substance is present in the following document tables:

- [Section 3: Physical Constants of Organic Compounds](#)
- [Section 3: Molar and Volume Susceptibility of Organic Compounds](#)
- [Section 5: Standard Thermodynamic Properties of Chemical Substances](#)
- [Section 5: Thermodynamic Properties As a Function of Temperature: Order of Listing](#)
- [Section 5: Heat of Combustion of Selected Substances](#)
- [Section 5: Enthalpy of Hydration for Gases at 298.15 K](#)
- [Section 5: Concentrative Properties of Aqueous Solutions: Density, Refractive Index, Freezing Point Depression, and Viscosity](#)
- [Section 5: Octanol-Water Partition Coefficients](#)
- [Section 6: Virial Coefficients at Selected Temperatures and Coefficients in the Equation Describing Their Temperature Dependence](#)
- [Section 6: Critical Constants](#)
- [Section 6: Temperature at Which Vapor Pressure Equals the Indicated Value](#)
- [Section 6: Enthalpy of Vaporization at the Boiling Point and at 25 °C](#)
- [Section 6: Molar Enthalpy of Fusion](#)
- [Section 6: Compressibility and Expansion Coefficients of Liquids](#)
- [Section 6: Surface Tension at Various Temperatures](#)
- [Section 6: Surface Tension in mN/m for the Specified Mass % of the Substance in H₂O](#)
- [Section 6: Dielectric Constants of Liquids](#)
- [Section 6: Azeotropic Temperature, Pressure, and Composition](#)
- [Section 6: Viscosity of Liquids as a Function of Temperature](#)
- [Section 6: Thermal Conductivity of Gases as a Function of Temperature](#)
- [Section 6: Thermal Conductivity of Liquids as a Function of Temperature](#)
- [Section 6: Diffusion Coefficients at Infinite Dilution](#)

- You can see all the other tables without having to go back to the other page

Perform a Chemical Search

- Click on the little flask icon at the top right of the page
- A new screen appears: click to draw a query structure or a “Structure Search”
 - Grab the Benzene icon on the bottom (far right) and click it up to the drawing screen; draw another one next to it by clicking again:

CRC Handbook of Chemistry and Physics

Access Provided by: CRC ADMIN USERS

Search Chemicals

Search

Boolean Property

AND	Chemical Name
AND	Molecular Formula
AND	Molecular Formula by Element
AND	CAS Registry No.
AND	Melting Point (°C)

Click to add structure to search query

Close

- Then you can click to add that structure to the search query
- Once you do all of this, click Search
- The results are the search results for that chemical's search:

Handbook of Chemistry and Physics

Access Provided by: CRC ADMIN USERS

Search Chemicals Result

Total Hits: 59

Page 1 of 4

Hits Per Page: 15

Select	Details	↑ Chemical Name	⇅ Synonym	⇅ Molecular Formula	⇅ CAS Registry No.
<input type="checkbox"/>		Anthra[9,1,2-cde]benzo[rs]pentaphene-5,10-dione		C ₂₄ H ₁₆ O ₂	116-71-2
<input type="checkbox"/>		2-Anthracenamine		C ₁₄ H ₁₁ N	613-13-8
<input type="checkbox"/>		Anthracene		C ₁₄ H ₁₀	120-12-7
<input type="checkbox"/>		9-Anthracenecarbonitrile		C ₁₅ H ₉ N	1210-12-4
<input type="checkbox"/>		9-Anthracenecarboxaldehyde		C ₁₅ H ₁₀ O	642-31-9
<input type="checkbox"/>		1-Anthracenecarboxylic acid	1-Anthroic acid	C ₁₅ H ₁₀ O ₂	607-42-1
<input type="checkbox"/>		2-Anthracenecarboxylic acid	2-Anthroic acid	C ₁₅ H ₁₀ O ₂	613-08-1
<input type="checkbox"/>		9-Anthracenecarboxylic acid	9-Anthroic acid	C ₁₅ H ₁₀ O ₂	723-62-6
<input type="checkbox"/>		9,10-Anthracenedicarbonitrile		C ₁₆ H ₈ N ₂	1217-45-4
<input type="checkbox"/>		9,10-Anthracenediol		C ₁₄ H ₁₀ O ₂	4981-66-2

- You can then sort them; the arrows mean you can click and search for the information in that column
- We can also add different columns to our hit list
 - Go to the navigation bar on the left side, click on Add/Remove Columns in Results"

Handbook of Chemistry and Physics

Access Provided by: CRC ADMIN USERS

Search Chemicals Result

Add/Remove Columns in Results

Select Hit Columns

Available

- Autoignition
- Temperature
- Boiling Point
- Common Formula
- Critical Pressure
- Critical Temperature
- Density (ambient)
- Dielectric Constant

Columns Displayed

- Chemical Name
- Synonym
- Molecular Formula
- CAS Registry No.

OK Close

Handbook of Chemistry and Physics

Access Provided by: CRC ADMIN USERS

Search Chemicals Result

Total Hits: 59

Page 1 of 4

Hits Per Page: 15

Select	Details	↑ Chemical	⇅ Synonym	⇅ Molecular Formula	⇅ CAS Registry No.
<input type="checkbox"/>		Anthra[9,1,2-cde]benzo[rs]pentaphene-5,10-dione		C ₂₄ H ₁₆ O ₂	116-71-2
<input type="checkbox"/>		2-Anthracenamine		C ₁₄ H ₁₁ N	613-13-8
<input type="checkbox"/>		Anthracene		C ₁₄ H ₁₀	120-12-7
<input type="checkbox"/>		9-Anthracenecarbonitrile		C ₁₅ H ₉ N	1210-12-4
<input type="checkbox"/>		9-Anthracenecarboxaldehyde		C ₁₅ H ₁₀ O	642-31-9
<input type="checkbox"/>		1-Anthracenecarboxylic acid	1-Anthroic acid	C ₁₅ H ₁₀ O ₂	607-42-1
<input type="checkbox"/>		2-Anthracenecarboxylic acid	2-Anthroic acid	C ₁₅ H ₁₀ O ₂	613-08-1
<input type="checkbox"/>		9-Anthracenecarboxylic acid	9-Anthroic acid	C ₁₅ H ₁₀ O ₂	723-62-6
<input type="checkbox"/>		9,10-Anthracenedicarbonitrile		C ₁₆ H ₈ N ₂	1217-45-4
<input type="checkbox"/>		9,10-Anthracenediol		C ₁₄ H ₁₀ O ₂	4981-66-2

- Click this; what is shown are all the column you could add
- Choose "Melting Point"

Handbook of Chemistry and Physics

Search Chemicals Result

Total Hits: 59 Page 1 of 4 Hits Per Page: 15

Select	Details	↑ Chemical Name	↕ Synonym	↕ Molecular Formula	↕ CAS Registry No.	↕ Melting Point (°C)
<input type="checkbox"/>		Anthra[9,1,2-cde]benzo[rs]pentaphene-5,10-dione		C ₃₄ H ₁₆ O ₂	116-71-2	492 dec
<input type="checkbox"/>		2-Anthracenamine		C ₁₄ H ₁₁ N	613-13-8	238.8
<input type="checkbox"/>		Anthracene		C ₁₄ H ₁₀	120-12-7	216(2)
<input type="checkbox"/>		9-Anthracenecarbonitrile		C ₁₅ H ₉ N	1210-12-4	177.5
<input type="checkbox"/>		9-Anthracenecarboxaldehyde		C ₁₅ H ₁₀ O	642-31-9	107(1)
<input type="checkbox"/>		1-Anthracenecarboxylic acid	1-Anthroic acid	C ₁₅ H ₁₀ O ₂	607-42-1	251.5
<input type="checkbox"/>		2-Anthracenecarboxylic acid	2-Anthroic acid	C ₁₅ H ₁₀ O ₂	613-08-1	281
<input type="checkbox"/>		9-Anthracenecarboxylic acid	9-Anthroic acid	C ₁₅ H ₁₀ O ₂	723-62-6	219(1)
<input type="checkbox"/>		9,10-Anthracenedicarbonitrile		C ₁₆ H ₈ N ₂	1217-45-4	337 dec
<input type="checkbox"/>		9,10-Anthracenediol		C ₁₄ H ₁₀ O ₂	4981-66-2	180

- You can use the arrows on the right to change the order in which those columns appear
- The column “Melting Point” will then appear
- Export to hit list:
 - Select 6 rows by clicking in the little checkbox; see green check marks

Handbook of Chemistry and Physics

Search Chemicals Result

Total Hits: 59 Page 1 of 4 Hits Per Page: 15

Export the Data

Select	Details	↑ Chemical Name	↕ Synonym	↕ Molecular Formula	↕ CAS Registry No.
<input type="checkbox"/>		Anthra[9,1,2-cde]benzo[rs]pentaphene-5,10-dione		C ₃₄ H ₁₆ O ₂	116-71-2
<input checked="" type="checkbox"/>		2-Anthracenamine		C ₁₄ H ₁₁ N	613-13-8
<input checked="" type="checkbox"/>		Anthracene		C ₁₄ H ₁₀	120-12-7
<input checked="" type="checkbox"/>		9-Anthracenecarbonitrile		C ₁₅ H ₉ N	1210-12-4
<input checked="" type="checkbox"/>		9-Anthracenecarboxaldehyde		C ₁₅ H ₁₀ O	642-31-9
<input checked="" type="checkbox"/>		1-Anthracenecarboxylic acid	1-Anthroic acid	C ₁₅ H ₁₀ O ₂	607-42-1
<input checked="" type="checkbox"/>		2-Anthracenecarboxylic acid	2-Anthroic acid	C ₁₅ H ₁₀ O ₂	613-08-1
<input type="checkbox"/>		9-Anthracenecarboxylic acid	9-Anthroic acid	C ₁₅ H ₁₀ O ₂	723-62-6
<input type="checkbox"/>		9,10-Anthracenedicarbonitrile		C ₁₆ H ₈ N ₂	1217-45-4
<input type="checkbox"/>		9,10-Anthracenediol		C ₁₄ H ₁₀ O ₂	4981-66-2

- Export icon is on the left, will say “Export the Data”
- Click “Selected Rows”

Handbook of Chemistry and Physics

Search Chemicals Result

Total Hits: 59

Page 1 of 4

Export Data

Select Rows: Row range Selected Rows Current Page

File Type: Please select

- Comma-Separated Text (.csv)
- Excel file (.xlsx) formatted text
- Excel file (.xlsx) unformatted text
- HTML file (.html)

Select	Details	Chemical Name	Synonym	Molecular Formula	CAS Registry No.
<input type="checkbox"/>		Anthra[9,1,2-cde]benzo[rsj]pentaph...		C ₂₄ H ₁₆ O ₂	116-71-2
<input checked="" type="checkbox"/>		2-Anthracenamine		C ₁₄ H ₁₁ N	613-13-8
<input checked="" type="checkbox"/>		Anthracene		C ₁₄ H ₁₀	120-12-7
<input checked="" type="checkbox"/>		9-Anthracenecarbonitrile		C ₁₅ H ₉ N	1210-12-4
<input checked="" type="checkbox"/>		9-Anthracenecarboxaldehyde		C ₁₅ H ₁₀ O	642-31-9
<input checked="" type="checkbox"/>		1-Anthracenecarboxylic acid		C ₁₅ H ₁₀ O ₂	607-42-1
<input checked="" type="checkbox"/>		2-Anthracenecarboxylic acid		C ₁₅ H ₁₀ O ₂	613-08-1
<input type="checkbox"/>		9-Anthracenecarboxylic acid	9-Anthroic acid	C ₁₅ H ₁₀ O ₂	723-62-6
<input type="checkbox"/>		9,10-Anthracenedicarbonitrile		C ₁₆ H ₈ N ₂	1217-45-4
<input type="checkbox"/>		9,10-Anthracenediol		C ₁₄ H ₁₀ O ₂	4981-66-2

- File Type: Excel file Formatted Text
- Tick the box “Auto column width”
- Export Data
- Spreadsheet opens in excel file, formatted correctly:

Substances (1).xlsx [Compatibility Mode] - Excel

File Home Insert Page Layout Formulas Data Review View Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

Chemical Name	Synonym	Molecular Formula	CAS Registry No.	Melting Point
2-Anthracenamine		C ₁₄ H ₁₁ N	613-13-8	238.8
Anthracene		C ₁₄ H ₁₀	120-12-7	216(2)
9-Anthracenecarbonitrile		C ₁₅ H ₉ N	1210-12-4	177.5
9-Anthracenecarboxaldehyde		C ₁₅ H ₁₀ O	642-31-9	107(1)
1-Anthracenecarboxylic acid	1-Anthroic acid	C ₁₅ H ₁₀ O ₂	607-42-1	251.5
2-Anthracenecarboxylic acid	2-Anthroic acid	C ₁₅ H ₁₀ O ₂	613-08-1	281

Ready HBCP Export

Perform a Complicated Chemical Search

- Go back to search chemicals screen; select “Clear Structure” to clear out the search

- Go to menu on the left, and go to “Add Properties”

The screenshot shows the 'Add Properties' dialog box in the Handbook of Chemistry and Physics interface. The dialog lists the following properties: All Entries, Autoignition Temperature, Boiling Point, CAS Registry No., Chemical Name, CRC Number, Critical Pressure, Critical Temperature, and Density (ambient). The main search results table in the background has the following columns: Boolean, Property, Value, and Delete. The Boolean column contains 'AND' for all rows. The Property column lists: Chemical Name, Molecular Formula, Molecular Formula by Element, CAS Registry No., and Melting Point (°C). The Value column contains input fields with 'clear' buttons. The Delete column contains 'x' buttons.

- Add molecular weight
- You will see that it appears at the bottom
 - In molecular weight, select an operator value (+, =, <, >, etc.)
 - Select > = 300
 - Hit search

The screenshot shows the search results page for 'Chemicals Result'. The total hits are 3555. The search results table has the following columns: Select, Details, Chemical Name, Synonym, Molecular Formula, CAS Registry No., Melting Point (°C), and Molecular Weight. The table contains the following data:

Select	Details	Chemical Name	Synonym	Molecular Formula	CAS Registry No.	Melting Point (°C)	Molecular Weight
<input type="checkbox"/>		Abate	Temephos	C ₁₆ H ₂₀ O ₆ P ₂ S ₃	3383-96-8	31.6(5)	466.469
<input type="checkbox"/>		Abietic acid	Sylvic acid	C ₂₀ H ₃₀ O ₂	514-10-3	173.5	302.451
<input type="checkbox"/>		Acadesine 5'-phosphate	5-Amino-1-β-D-ribose-1H-imidazole-4-carboxamide 5'-phosphate	C ₉ H ₁₅ N ₄ O ₉ P	3031-94-5		338.211
<input type="checkbox"/>		Acebutolol, (±)-		C ₁₈ H ₂₈ N ₂ O ₄	37517-30-9	121	336.426
<input type="checkbox"/>		Acedapsone		C ₁₆ H ₁₈ N ₂ O ₄ S	77-46-3	290	332.374
<input type="checkbox"/>		Acenocoumarol	Nicoumalone	C ₁₉ H ₁₅ NO ₆	152-72-7	198	353.325
<input type="checkbox"/>		Acepromazine	1-[10-[3-(Dimethylamino)propyl]-10H-phenothiazin-2-yl]ethanone	C ₁₉ H ₂₂ N ₂ OS	61-00-7		326.455
<input type="checkbox"/>		Acetohexamide		C ₁₅ H ₂₀ N ₂ O ₄ S	968-81-0	188	324.396

- Add molecular weight as a column

- You can now sort molecular weight; go to column heading and click; it sorts the weight
 - If you click on it again, it will sort by highest or lowest value

Bookmarking Pages

- Go back to the home screen
- Go to section 7 in the menu on the left navigation; “Biochemistry”
 - Open “Structures of Common Amino Acids”

The screenshot shows a web browser displaying the 'Handbook of Chemistry and Physics' website. The page is titled 'STRUCTURES OF COMMON AMINO ACIDS' and lists twelve amino acids with their chemical structures and names: L-Alanine (Ala), L-Arginine (Arg), L-Asparagine (Asn), L-Aspartic acid (Asp), L-Cysteine (Cys), L-Glutamine (Gln), L-Glutamic acid (Glu), Glycine (Gly), L-Histidine (His), L-Isoleucine (Ile), L-Leucine (Leu), and L-Lysine (Lys). A 'Bookmark Page' button is located in the top right corner of the page content area.

- Click “Bookmark Page” button on the top right
- Stored bookmarks will appear in the bookmark icon at the top, next to archives button
- You may be notified that you have to create a workspace in order to access your bookmarks
- Click Sign In to your workspace:

The screenshot shows the same website as above, but with a 'Sign In to Your Workspace' dialog box overlaid. The dialog box contains the following text: 'Your personal workspace allows you to save and access your searches and bookmarks.' It has input fields for 'Username' and 'Password', a 'Remember Me' checkbox, and a note: 'This will save a cookie on your browser'. There are 'Sign In' and 'Cancel' buttons. Below the dialog box, there is a message: 'If you do not have a workspace Sign In [click here](#) to create one. Forgotten your workspace password? [Click here for an e-mail reminder.](#)'

- If you don't have a workspace, click to create one:

The screenshot shows a web browser window with the URL hbcpnline.com/faces/documents/07_02/07_02_0001.xhtml. The page title is "Handbook of Chemistry and Physics". A modal dialog box titled "Create your personal workspace" is open, with the following fields:

- Title: [Select]
- First Name (Given): Nally
- Last Name (Family): Dookwah-Abrams
- Email address: nally.dookwah-abrami
- Username: dookwah-abramsn
- Password: [masked]
- Confirm Password: [masked]

 The background of the page shows the "STRUCTURES OF" section for amino acids, with chemical structures for L-Alanine (Ala), L-Cysteine (Cys), L-Histidine (His), L-Isoleucine (Ile), L-Leucine (Leu), and L-Lysine (Lys).

- Once you are finished creating one, your bookmarks will then appear in the tab

Graphing Search Results

- Go back to your home screen
- Go to section 6 "Fluid Properties"
- Open "Critical Constants of Organic Compounds"

The screenshot shows a web browser window with the URL hbcpnline.com/faces/documents/06_58/06_58_0001.xhtml. The page title is "Handbook of Chemistry and Physics". The page is titled "CRITICAL CONSTANTS OF ORGANIC COMPOUNDS" and is part of Section 6. The authors listed are Chris D. Muzny, Vladimir Diky, Andrei Kazakov, Robert D. Chirico, and Michael Frenkel. The text describes the parameters of the liquid-gas critical point and lists the critical constants:

- T_b : Normal boiling point in K at a pressure of 101.325 kPa (1 atmosphere); "sp" following the value indicates a sublimation point (temperature at which the solid is in equilibrium with the gas at a pressure of 101.325 kPa)
- T_c : Critical temperature in K
- P_c : Critical pressure in MPa
- V_c : Critical molar volume in $\text{cm}^3 \text{mol}^{-1}$

 The page also includes a navigation bar with "Page 1 of 44" and a search bar.

- It will open the document; click on the dropdown next to “Go to Interactive Table”
 - Select Critical Constants
 - Again, you can sort the columns, export the data, etc.
 - Sort by molecular weight; plot molecular weight against boiling point; Select first 8 rows:

Section: 6 | Document: Critical Constants of Organic Compounds

Interactive Table: Critical Constants

(1 of 58) Go to page: 1 Rows per page: 15

Select	Row	Name	Synonym	Mol. form.	CAS Reg. No.	Mol. wt.	T_b/K	T_c/K	P_c/MPa	$V_c/cm^3 mol^{-1}$	Ref. (see text)
<input checked="" type="checkbox"/>	477	Methane		CH ₄	74-82-8	16.043	111.7(2)	190.56(2)	4.60(1)	99(3)	132, 134, 498-508
<input type="checkbox"/>	478	Methane-d ₄		CD ₄	558-20-3	20.067		189.2(6)		98(3)	507
<input checked="" type="checkbox"/>	7	Acetylene	Ethyne	C ₂ H ₂	74-86-2	26.037	188.5 sp	308.4(4)	6.24(4)	119(11)	42-48
<input checked="" type="checkbox"/>	338	Ethylene	Ethene	C ₂ H ₄	74-85-1	28.053	169.4(3)	282.35(3)	5.06(1)	130.9(2)	61, 246, 371, 418-436
<input checked="" type="checkbox"/>	318	Ethane		C ₂ H ₆	74-84-0	30.069	184.6(4)	305.36(4)	4.88(1)	146(3)	44, 48, 92, 131, 132, 134, 214, 215, 229, 246, 366-393
<input checked="" type="checkbox"/>	492	Methylamine	Methanamine	CH ₃ N	74-89-5	31.058	266.8(3)	430.6(6)	7.61(9)	139(1)	130, 193, 322, 323
<input checked="" type="checkbox"/>	480	Methanol	Methyl alcohol	CH ₃ O	67-56-1	32.042	337.7(7)	512.7(6)	8.01(3)	117(4)	19, 38, 67, 80, 85, 87, 131, 148, 152, 155, 196, 405, 458, 482, 509-516
<input checked="" type="checkbox"/>	368	Fluoromethane	Methyl fluoride	CH ₃ F	593-53-3	34.033	194.84	317.42(1)	5.88(1)	112.4(1)	444, 445
<input checked="" type="checkbox"/>	9	Allene		C ₃ H ₄	463-49-0	40.064	238.4(3)	394(4)	6.5(7)	167(8)	50
<input type="checkbox"/>	727	Propyne	Methylacetylene	C ₃ H ₄	74-99-7	40.064	250.0	402(2)	5.63(6)	160(10)	605, 611

- Select graph numerical data in the menu on the left
- Graph Type: Line graph
- X-Axis: Molecular Weight
- Y-Axis: Boiling Point (T_b/K means boiling point)
- Check “Selected Rows”

Section: 6 | Document: Critical Constants of Organic Compounds

Interactive Table: Critical Constants

(1 of 58) Rows per page: 15

Select	Row	Name	Synonym	Mol. form.	CAS Reg. No.	Mol. wt.	T_b/K	T_c/K	P_c/MPa	$V_c/cm^3 mol^{-1}$	Ref. (see text)
<input checked="" type="checkbox"/>	477	Methane		CH ₄	74-82-8	16.043	111.7(2)	190.56(2)	4.60(1)	99(3)	132, 134, 498-508
<input type="checkbox"/>	478	Methane-d ₄		CD ₄	558-20-3	20.067		189.2(6)		98(3)	507
<input checked="" type="checkbox"/>	7	Acetylene	Ethyne	C ₂ H ₂	74-86-2	26.037	188.5 sp	308.4(4)	6.24(4)	119(11)	42-48
<input checked="" type="checkbox"/>	338	Ethylene	Ethene	C ₂ H ₄	74-85-1	28.053	169.4(3)	282.35(3)	5.06(1)	130.9(2)	61, 246, 371, 418-436
<input checked="" type="checkbox"/>	318	Ethane		C ₂ H ₆	74-84-0	30.069	184.6(4)	305.36(4)	4.88(1)	146(3)	44, 48, 92, 131, 132, 134, 214, 215, 229, 246, 366-393
<input checked="" type="checkbox"/>	492	Methylamine	Methanamine	CH ₃ N	74-89-5	31.058	266.8(3)	430.6(6)	7.61(9)	139(1)	130, 193, 322, 323
<input checked="" type="checkbox"/>	480	Methanol	Methyl alcohol	CH ₃ O	67-56-1	32.042	337.7(7)	512.7(6)	8.01(3)	117(4)	19, 38, 67, 80, 85, 87, 131, 148, 152, 155, 196, 405, 458, 482, 509-516
<input checked="" type="checkbox"/>	368	Fluoromethane	Methyl fluoride	CH ₃ F	593-53-3	34.033	194.84	317.42(1)	5.88(1)	112.4(1)	444, 445
<input checked="" type="checkbox"/>	9	Allene		C ₃ H ₄	463-49-0	40.064	238.4(3)	394(4)	6.5(7)	167(8)	50
<input type="checkbox"/>	727	Propyne	Methylacetylene	C ₃ H ₄	74-99-7	40.064	250.0	402(2)	5.63(6)	160(10)	605, 611

Graph Numerical Data

Graph Type: Line

x-Axis: Mol. wt.

y-Axis: Tb/K

Label: None (use x-axis label)

Zoom Type: None

Points to plot (max. 500): Selected Rows

Row range

Filter/Search results

Generate Graph Cancel

- Generate Graph:

