

CHEMnetBASE



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ONLINE CHEMICAL DATABASES

Research Solvents with a 5-Membered Heterocyclic Ring. Sub-Structure Searching ...



CRCnetBASE Presents...
CHEMnetBASE
Chemical Databases Online

Periodic Table of Elements | Welcome To... **CHEMnetBASE.com** | A wealth of chemical information is just a click away. | Handbook of Chemistry & Physics

ONLINE REFERENCES

Handbook of Chemistry and Physics, continues to be the most accessed and respected scientific reference in the world, used by students and Nobel

Combined Chemical Dictionary (CCD)
Spanning the breadth of chemistry this database provides access to chemical, physical and structural data on more than 540,000 compounds. The presence of powerful search software allows sophisticated text and structure searches to be performed easily.
[Take a Tour](#)

CRC Press Taylor & Francis Group | **Dictionary of Organic Compounds** | **CHEMnetBASE**

Combined Structure Sketch - Windows Internet Explorer

File Edit View Insert Atom Bond Structure Calculations Tools Help

Search

Search View Results Draw Query Clear Str

Add Property Clear P

Boolean	Property
AND	Chemical Name
AND	Molecular Formula
AND	Molecular Formula
AND	CAS Registry Nos
AND	All Text
AND	Melting Point
AND	Boiling Point

Click here to add structure to search



Sub-Structure Searching (Carbon to Heterocyclic)

- ✓ Click on **DRAW Query**.
Select your 5-membered ring from the tool palette
- ✓ Modify the atoms to make them heterocyclic instead of carbon by **CLICKING** on **PERIODIC TABLE**
- ✓ Click on the **NOT LIST** button and then **C**.

Structure Sketch - Windows Internet Explorer

File Edit View Insert Atom Bond Structure Calculations Tools Help

100%

Periodic Table of Chemical Elements

Periodic Table Advanced

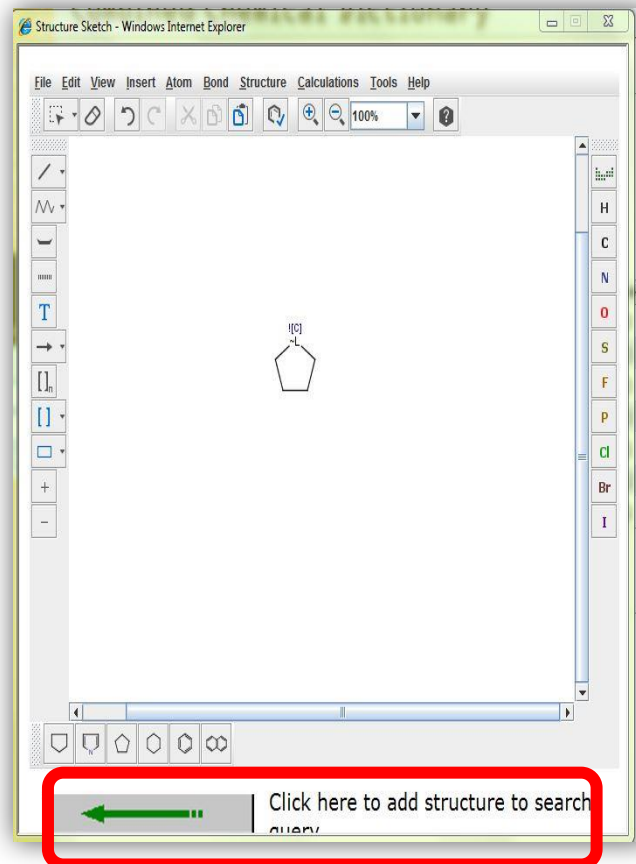
Name: Curium (Cm)
Atomic number: 96
Mass: 247.0
Electronegativity: 0.0
Ox. state(s): 0,1,2,3

Color schema: CPK Standard state None
Blocks Metals/Nonmetals

Click here to query

Sub-Structure Searching Change That Node

- ✓ Go back your 5-membered ring and **CLICK** on one of the **NODES**. The symbol immediately changes.
- ✓ Click on the **GREEN ARROW** to move your structure to the **SEARCH SCREEN**.



Research Solvents with a 5- Membered Heterocyclic Ring

- ✓ Add your *property* that enables you to search for solvents.
- ✓ Choose **USE/IMPORTANCE** from the **ADD PROPERTY** box and type in **SOLVENT**.

The screenshot displays the CHEMnetBASE search interface. A dropdown menu titled 'Add Property...' is open, showing a list of properties. The property 'Use/Importance' is highlighted with a red box. Below the dropdown, the 'Add Property' button is also highlighted with a red box. The search query is entered as '!![C]~L' in the 'Draw Query' field, which is also highlighted with a red box. A red arrow points from the 'Use/Importance' property to the search query. The search results table is visible at the bottom, showing columns for Boolean, Property, Comparison, and Value.

Boolean	Property	Comparison	Value
AND	Chemical Name		[browse...] [clear]
AND	Molecular Formula		[browse...] [clear]
AND	Molecular Formula by Element	=	C [clear]
AND	CAS Registry Nos.		[browse...] [clear]
AND	All Text		[browse...] [clear]
AND	Melting Point	=	[browse...] [clear]
AND	Boiling Point	=	[browse...] [clear]

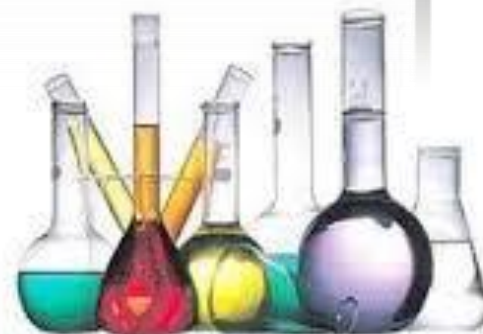
Research Solvents with a 5-Membered Heterocyclic Ring

AND Boiling Point = [browse...] [clear]

AND Use/Importance solvent [browse...] [clear]

Search results in New Window

- ✓ After typing in **SOLVENT** click on **SEARCH**.



Research Solvents with a 5-Membered Heterocyclic Ring

- ✓ Search results are listed alphabetically. **Click** on the compound **TETRAHYDROFURAN**.

Combined Chemical Dictionary

Search Results


Return to Search Columns... Export As... Found 203 matches from 815126 documents.

Details Chemical Name

- 1,2,3,4-Tetrachloro-1,1,2,3,4,4-hexafluorobutane
- Tetrahydro-2,4-dimethylthiophene, S,S-Dioxide
- Tetrahydrofuran
- Tetrahydro-2-furanmethanol, (±)-form
- 1,2,3,4-Tetrahydronaphthalene
- Tetraphenylarsonium tetraphenylborate
- Tribromomethane
- Tributyl phosphate
- 1,1,1-Trichloro-2,2-difluoroethane
- Trichloroethylene
- 1,1,2-Trichloro-1-fluoroethane
- 1,1,2-Trichloro-1,2,3,3,3-pentafluoropropane, (±)-form
- 1,1,3-Trichloro-1,2,2,3,3-pentafluoropropane
- 1,1,2-Trichloro-1,2,2-trifluoroethane
- Tridodecylamine
- Triethylene glycol
- Triethylene glycol, Monobutyl ether
- Triethylene glycol, Mono-Et ether
- Triethylene glycol, Mono-Me ether
- 1,1,2-Trifluoroethane
- 2,2,2-Trifluoroethanol
- 3,5,5-Trimethyl-2-cyclohexen-1-one
- Trimethyl phosphate
- Trinonylamine

Entry Name: Tetrahydrofuran, 8CI, 9CI

Synonym(s): Tetramethylene oxide. Oxolan. Furanidine. THF.



CRC Number: CST23-P

CAS Registry Number: 109-99-9

Molecular Formula: C₄H₈O

Molecular Weight: 72.107

Accurate Mass: 72.057515

Percentage Composition: C 66.63%; H 11.18%; O 22.19%

Source / Synthesis: Usually manuf. from 1,4-Butanediol; a new process (1992) operated by Du Pont involves hardened-catalyst oxidn. of butane

Use / Importance: Extensively-used solvent. Useful for reactions involving organo-Li compds. and Grignard reagents. Precursor for polyether glycols, intermed. in manuf. of Tetrahydrothiophene. Used as an extraction solvent e.g. for Fe(III)-SCN complex

Physical Description: Liq. with characteristic ethereal-type odour

Melting Point: Mp -108°

Boiling point: Bp 67°

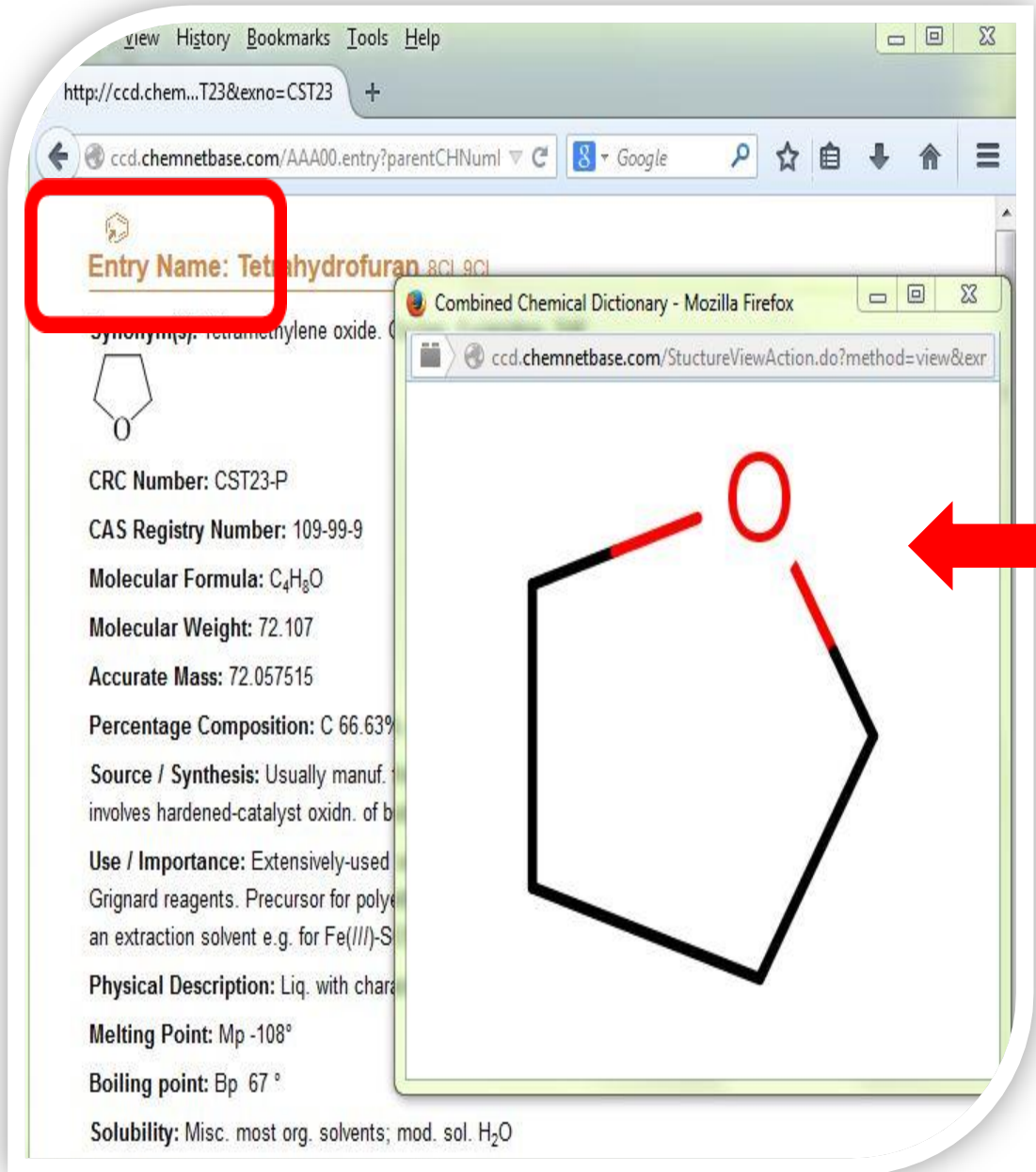
Solubility: Misc. most org. solvents; mod. sol. H₂O

Density: d₄²⁰ 0.89

Return to Search Columns... Export As... Page 8 of 9 Go to Page

Research Solvents with a 5- Membered Heterocyclic Ring

- ✓ To see all the editable structures for each compound, **click** on the **STRUCTURE ICON**.



view History Bookmarks Tools Help

http://ccd.chem...T23&exno=CST23

ccd.chemnetbase.com/AAA00.entry?parentCHNuml

Entry Name: Tetrahydrofuran

Synonyms: tetramethylene oxide.

CRC Number: CST23-P

CAS Registry Number: 109-99-9

Molecular Formula: C₄H₈O

Molecular Weight: 72.107

Accurate Mass: 72.057515

Percentage Composition: C 66.63%

Source / Synthesis: Usually manuf. involves hardened-catalyst oxidn. of b

Use / Importance: Extensively-used Grignard reagents. Precursor for poly an extraction solvent e.g. for Fe(III)-S

Physical Description: Liq. with chara

Melting Point: Mp -108°

Boiling point: Bp 67°

Solubility: Misc. most org. solvents; mod. sol. H₂O

Combined Chemical Dictionary - Mozilla Firefox

ccd.chemnetbase.com/StructureViewAction.do?method=view&extr

Research Solvents with a 5-Membered Heterocyclic Ring

- You can add more data to your report by clicking on the **COLUMNS** button.
- Add the **CAS Registry Number**, which validates your research and the Structure Drawing.

The screenshot shows the ChemnetBASE search results page. The 'Manage Fields' dialog box is open, showing a list of available fields on the left and selected fields on the right. The 'Selected Fields' list contains 'Chemical Name' and 'Molecular Formula'. A red box highlights the 'Selected Fields' list, and a red arrow points to the 'OK' button. The background shows search results for '1,2,3,4-Tetrachloro-1,1,2,3,4,4-hexafluorobutane' and other compounds.

Combined Chemical Dictionary

Search Results

Return to Search Columns... Export As... Page 8 of 9

Found 203 matches from 615126 documents.

Details Chemical Name

<input type="checkbox"/>	1,2,3,4-Tetrachloro-1,1,2,3,4,4-hexafluorobutane
<input type="checkbox"/>	Tetrahydro-2,4-dimethylthiophene; S,S-Dioxide
<input type="checkbox"/>	Tetrahydrofuran
<input type="checkbox"/>	Tetrahydro-2-furanmethanol; (±)-form
<input type="checkbox"/>	1,2,3,4-Tetrahydronaphthalene
<input type="checkbox"/>	Tetraphenylarsonium tetraphenylborate
<input type="checkbox"/>	Toluene
<input type="checkbox"/>	Tribromomethane
<input type="checkbox"/>	Tributyl phosphate
<input type="checkbox"/>	1,1,1-Trichloro-2,2-difluoroethane
<input type="checkbox"/>	Trichloroethylene
<input type="checkbox"/>	1,1,2-Trichloro-1-fluoroethane
<input type="checkbox"/>	1,1,2-Trichloro-1,2,3,3-pentafluoropropane; (±)-form
<input type="checkbox"/>	1,1,3-Trichloro-1,2,2,3,3-pentafluoropropane
<input type="checkbox"/>	1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/>	Tridodecylamine
<input type="checkbox"/>	Triethylene glycol
<input type="checkbox"/>	Triethylene glycol; Monobutyl ether

Manage Fields: Combined Chemi...

Fields

Available Fields

- Accurate Mass
- Amino Acid Sequence
- Biological Source
- Biological Use/Importance
- Boiling Point
- CAS Registry Nos.
- CRC Number
- Density
- Development Status
- Dissociation Const.
- General Statement
- Hazard and Toxicity
- Melting Point
- Molecular Weight
- Optical Rotation
- Partition Coefficient (Calc.)
- Percent Composition
- Physical Description

Selected Fields

- Chemical Name
- Molecular Formula

OK Cancel

Up Down

C₂Cl₃F₃
C₃₈H₇₅N
C₈H₁₄O₄
C₁₀H₂₂O₄

Combined Chemical Dictionary







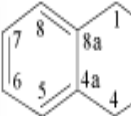
Search Results

[Return to Search](#)[Columns...](#)[Export As...](#)

Page 8 of 9

[Go to Page](#)

Found 203 matches from 615126 documents.

Details	CAS Registry Nos.	Chemical Name	Molecular Formula	Structure Drawing
	375-45-1	1,2,3,4-Tetrachloro-1,1,2,3,4,4-hexafluorobutane	$C_4Cl_4F_6$	[no image available]
	1003-78-7	Tetrahydro-2,4-dimethylthiophene; S,S-Dioxide	$C_6H_{12}O_2S$	[no image available]
	109-99-9	Tetrahydrofuran	C_4H_8O	
	72074-94-3	Tetrahydro-2-furanmethanol; (±)-form	$C_5H_{10}O_2$	[no image available]
	119-64-2	1,2,3,4-Tetrahydronaphthalene		



Combined Chemical Dictionary

ccd.chemnetbase.com/dictior

Export As

Rows (Maximum of 100)

Export Format

You can now...

1. Create a structure
2. Add properties
3. Search properties
4. Bring back results from certain compounds and structures
5. View what can be edited in a structure
6. Know how to add data to a report
7. Export that data to HTML or EXCEL

