

Cyclobutanemethanol

Other names:	Hydroxymethylcyclobutane Cyclobutylmethanol
Inchi:	InChI=1S/C5H10O/c6-4-5-2-1-3-5/h5-6H,1-4H2
InchiKey:	WPOPOPFNZYPKAV-UHFFFAOYSA-N
Formula:	C5H10O
SMILES:	OCC1CCC1
Mol. weight [g/mol]:	86.13
CAS:	4415-82-1

Physical Properties

Property code	Value	Unit	Source
gf	-96.95	kJ/mol	Joback Method
hf	-232.12	kJ/mol	Joback Method
hfus	8.83	kJ/mol	Joback Method
hvap	43.49	kJ/mol	Joback Method
log10ws	-0.83		Crippen Method
logp	0.779		Crippen Method
mvol	76.320	ml/mol	McGowan Method
pc	4749.69	kPa	Joback Method
tb	416.70	K	NIST Webbook
tc	598.96	K	Joback Method
tf	221.35	K	Joback Method
vc	0.283	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	151.61	J/molxK	416.99	Joback Method
cpg	197.38	J/molxK	568.63	Joback Method
cpg	189.17	J/molxK	538.30	Joback Method
cpg	180.51	J/molxK	507.98	Joback Method
cpg	171.38	J/molxK	477.65	Joback Method
cpg	161.75	J/molxK	447.32	Joback Method
cpg	205.15	J/molxK	598.96	Joback Method

dvisc	0.0003808	Paxs	416.99	Joback Method
dvisc	0.0005956	Paxs	384.38	Joback Method
dvisc	0.0010120	Paxs	351.78	Joback Method
dvisc	0.0019163	Paxs	319.17	Joback Method
dvisc	0.0041960	Paxs	286.56	Joback Method
dvisc	0.0112357	Paxs	253.96	Joback Method
dvisc	0.0402158	Paxs	221.35	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4415821&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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