

Cyclohexane, 1-methyl-4-methylene-

Other names:	1-Methylene-4-methylcyclohexane 4-Methyl-1-methylenecyclohexane 4-Methylmethylenecyclohexane
Inchi:	InChI=1S/C8H14/c1-7-3-5-8(2)6-4-7/h8H,1,3-6H2,2H3
InchiKey:	DRTOPLRMDZJIGV-UHFFFAOYSA-N
Formula:	C8H14
SMILES:	C=C1CCC(C)CC1
Mol. weight [g/mol]:	110.20
CAS:	2808-80-2

Physical Properties

Property code	Value	Unit	Source
gf	94.01	kJ/mol	Joback Method
hf	-69.89	kJ/mol	Joback Method
hfus	7.15	kJ/mol	Joback Method
hvap	33.99	kJ/mol	Joback Method
log10ws	-2.68		Crippen Method
logp	2.753		Crippen Method
mcvol	108.420	ml/mol	McGowan Method
pc	3220.98	kPa	Joback Method
rinpol	803.50		NIST Webbook
rinpol	800.70		NIST Webbook
rinpol	803.50		NIST Webbook
tb	396.00 ± 5.00	K	NIST Webbook
tc	603.93	K	Joback Method
tf	200.98	K	Joback Method
vc	0.401	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	200.35	J/molxK	401.15	Joback Method
cpg	272.33	J/molxK	570.13	Joback Method
cpg	259.32	J/molxK	536.33	Joback Method

cpg	245.63	J/molxK	502.54	Joback Method
cpg	231.25	J/molxK	468.74	Joback Method
cpg	216.16	J/molxK	434.95	Joback Method
cpg	284.69	J/molxK	603.93	Joback Method
dvisc	0.0002732	Paxs	401.15	Joback Method
dvisc	0.0003453	Paxs	367.79	Joback Method
dvisc	0.0004573	Paxs	334.43	Joback Method
dvisc	0.0006445	Paxs	301.06	Joback Method
dvisc	0.0009895	Paxs	267.70	Joback Method
dvisc	0.0017162	Paxs	234.34	Joback Method
dvisc	0.0035739	Paxs	200.98	Joback Method

Sources

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=C2808802&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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