

cis-3,4-dimethylcyclopentene

Inchi:	InChI=1S/C7H12/c1-6-4-3-5-7(6)2/h3-4,6-7H,5H2,1-2H3
InchiKey:	JOVGLRSLWFSVNB-COBESHVPSA-N
Formula:	C7H12
SMILES:	CC1C=CCC1C
Mol. weight [g/mol]:	96.17
CAS:	56039-55-5

Physical Properties

Property code	Value	Unit	Source
gf	66.86	kJ/mol	Joback Method
hf	-89.89	kJ/mol	Joback Method
hfus	10.11	kJ/mol	Joback Method
hvap	31.42	kJ/mol	Joback Method
log10ws	-2.02		Crippen Method
logp	2.219		Crippen Method
mvol	94.330	ml/mol	McGowan Method
pc	3431.89	kPa	Joback Method
tb	369.33	K	Joback Method
tc	564.73	K	Joback Method
tf	176.07	K	Joback Method
vc	0.353	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	162.58	J/molxK	369.33	Joback Method
cpg	176.79	J/molxK	401.90	Joback Method
cpg	190.33	J/molxK	434.46	Joback Method
cpg	203.23	J/molxK	467.03	Joback Method
cpg	215.51	J/molxK	499.60	Joback Method
cpg	227.19	J/molxK	532.16	Joback Method
cpg	238.28	J/molxK	564.73	Joback Method
dvisc	0.0012019	Paxs	176.07	Joback Method
dvisc	0.0007499	Paxs	208.28	Joback Method

dvisc	0.0005309	Paxs	240.49	Joback Method
dvisc	0.0004078	Paxs	272.70	Joback Method
dvisc	0.0003312	Paxs	304.91	Joback Method
dvisc	0.0002799	Paxs	337.12	Joback Method
dvisc	0.0002436	Paxs	369.33	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
KDB:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=624
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C56039555&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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