Cyclohexane, (1,2-dimethylpropyl)-

Other names: (1,2-Dimethylpropyl)cyclohexane
Inchi: InChI=1S/C11H22/c1-9(2)10(3)11-7-5-4-6-8-11/h9-11H,4-8H2,1-3H3
InchiKey: FGMIBQACCWIIBU-UHFFFAOYSA-N
Formula: C11H22
SMILES: CC(C)C(C)C1CCCCC1
Mol. weight [g/mol]: 154.29
CAS: 51284-29-8

Physical Properties

Property code	Value	Unit	Source
gf	61.31	kJ/mol	Joback Method
hf	-226.61	kJ/mol	Joback Method
hfus	9.03	kJ/mol	Joback Method
hvap	39.73	kJ/mol	Joback Method
log10ws	-3.60		Crippen Method
logp	3.859		Crippen Method
mcvol	154.990	ml/mol	McGowan Method
pc	2372.59	kPa	Joback Method
rinpol	1295.00		NIST Webbook
tb	469.75	K	Joback Method
tc	673.34	K	Joback Method
tf	191.11	K	Joback Method
vc	0.573	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.74	J/mol×K	469.75	Joback Method
cpg	368.10	J/mol×K	503.68	Joback Method
cpg	388.39	J/mol×K	537.61	Joback Method
cpg	407.62	J/mol×K	571.54	Joback Method
cpg	425.84	J/mol×K	605.48	Joback Method
cpg	443.07	J/mol×K	639.41	Joback Method
cpg	459.34	J/mol×K	673.34	Joback Method

dvisc	0.0274617	Pa×s	191.11	Joback Method
dvisc	0.0056474	Pa×s	237.55	Joback Method
dvisc	0.0019481	Pa×s	283.99	Joback Method
dvisc	0.0009064	Pa×s	330.43	Joback Method
dvisc	0.0005092	Pa×s	376.87	Joback Method
dvisc	0.0003247	Pa×s	423.31	Joback Method
dvisc	0.0002263	Pa×s	469.75	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C51284298&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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