(1,1-dimethylethyl)-cyclopropane

Other names: Cyclopropane, 1,1-dimethylethyl
Inchi: InChI=1S/C7H14/c1-7(2,3)6-4-5-6/h6H,4-5H2,1-3H3
InchiKey: CJKIVLPJDVFXJP-UHFFFAOYSA-N
Formula: C7H14
SMILES: CC(C)(C)C1CC1
Mol. weight [g/mol]: 98.19

Physical Properties

Property code	Value	Unit	Source
gf	71.65	kJ/mol	Joback Method
hf	-123.76	kJ/mol	Joback Method
hfus	4.61	kJ/mol	Joback Method
hvap	29.79	kJ/mol	Joback Method
log10ws	-2.16		Crippen Method
logp	2.442		Crippen Method
mcvol	98.630	ml/mol	McGowan Method
pc	3299.15	kPa	Joback Method
rinpol	627.00		NIST Webbook
rinpol	627.40		NIST Webbook
tb	363.07	K	Joback Method
tc	553.66	K	Joback Method
tf	189.01	K	Joback Method
vc	0.373	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	178.03	J/mol×K	363.07	Joback Method
cpg	193.36	J/mol×K	394.83	Joback Method
cpg	207.77	J/mol×K	426.60	Joback Method
cpg	221.29	J/mol×K	458.36	Joback Method
cpg	233.97	J/mol×K	490.13	Joback Method
cpg	245.87	J/mol×K	521.89	Joback Method
cpg	257.02	J/mol×K	553.66	Joback Method

dvisc	0.0021615	Pa×s	189.01	Joback Method
dvisc	0.0013258	Pa×s	218.02	Joback Method
dvisc	0.0009122	Pa×s	247.03	Joback Method
dvisc	0.0006789	Pa×s	276.04	Joback Method
dvisc	0.0005345	Pa×s	305.05	Joback Method
dvisc	0.0004386	Pa×s	334.06	Joback Method
dvisc	0.0003715	Pa×s	363.07	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R136902&Units=SI

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