trans-1-Methyl-2-isopropylcyclopropane

Other names: 1-methyl-trans-2-isopropyl-cyclopropane
Inchi: InChI=1S/C7H14/c1-5(2)7-4-6(7)3/h5-7H,4H2,1-3H3/t6-,7+/m1/s1
InchiKey: JDZVNQMEYFJAND-RQJHMYQMSA-N
Formula: C7H14
SMILES: CC(C)C1CC1C
Mol. weight [g/mol]: 98.19

Physical Properties

Property code	Value	Unit	Source
gf	58.66	kJ/mol	Joback Method
hf	-140.63	kJ/mol	Joback Method
hfus	9.57	kJ/mol	Joback Method
hvap	30.39	kJ/mol	Joback Method
log10ws	-1.92		Crippen Method
logp	2.298		Crippen Method
mcvol	98.630	ml/mol	McGowan Method
pc	3138.51	kPa	Joback Method
rinpol	625.00		NIST Webbook
rinpol	624.80		NIST Webbook
tb	361.19	K	Joback Method
tc	543.00	K	Joback Method
tf	167.35	K	Joback Method
vc	0.378	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	177.42	J/mol×K	361.19	Joback Method
cpg	191.50	J/mol×K	391.49	Joback Method
cpg	204.93	J/mol×K	421.79	Joback Method
cpg	217.72	J/mol×K	452.10	Joback Method
cpg	229.90	J/mol×K	482.40	Joback Method
cpg	241.50	J/mol×K	512.70	Joback Method
cpg	252.54	J/mol×K	543.00	Joback Method

dvisc	0.0005968	Pa×s	167.35	Joback Method
dvisc	0.0004714	Pa×s	199.66	Joback Method
dvisc	0.0003977	Pa×s	231.96	Joback Method
dvisc	0.0003497	Pa×s	264.27	Joback Method
dvisc	0.0003163	Pa×s	296.58	Joback Method
dvisc	0.0002917	Pa×s	328.88	Joback Method
dvisc	0.0002730	Pa×s	361.19	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=R137529&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

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