Cyclopentene, 1-(1-methylethyl)-

Other names:	1-Isopropylcyclopentene
	1-Isopropylcyclopentene-1
Inchi:	InChI=1S/C8H14/c1-7(2)8-5-3-4-6-8/h5,7H,3-4,6H2,1-2H3
InchiKey:	HDFWVJAQABCYDP-UHFFFAOYSA-N
Formula:	C8H14
SMILES:	CC(C)C1=CCCC1
Mol. weight [g/mol]:	110.20
CAS:	1462-07-3

Physical Properties

Property code	Value	Unit	Source
gf	78.63	kJ/mol	Joback Method
hf	-86.60	kJ/mol	Joback Method
hfus	6.65	kJ/mol	Joback Method
hvap	34.53	kJ/mol	Joback Method
log10ws	-2.68		Crippen Method
logp	2.753		Crippen Method
mcvol	108.420	ml/mol	McGowan Method
pc	3287.81	kPa	Joback Method
rinpol	834.00		NIST Webbook
rinpol	839.00		NIST Webbook
rinpol	804.50		NIST Webbook
rinpol	809.40		NIST Webbook
rinpol	812.50		NIST Webbook
rinpol	833.00		NIST Webbook
rinpol	809.00		NIST Webbook
rinpol	812.00		NIST Webbook
rinpol	809.00		NIST Webbook
rinpol	839.00		NIST Webbook
rinpol	809.00		NIST Webbook
rinpol	816.00		NIST Webbook
rinpol	804.00		NIST Webbook
rinpol	812.00		NIST Webbook
ripol	926.60		NIST Webbook
ripol	932.00		NIST Webbook
ripol	938.00		NIST Webbook
ripol	937.50		NIST Webbook

ripol	926.60		NIST Webbook
ripol	931.80		NIST Webbook
ripol	937.50		NIST Webbook
ripol	926.60		NIST Webbook
ripol	931.80		NIST Webbook
ripol	938.00		NIST Webbook
ripol	927.00		NIST Webbook
ripol	938.00		NIST Webbook
tb	405.60 ± 4.00	K	NIST Webbook
tc	607.67	K	Joback Method
tf	193.34	K	Joback Method
vc	0.406	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	202.89	J/mol×K	406.09	Joback Method
cpg	217.83	J/mol×K	439.69	Joback Method
cpg	231.99	J/mol×K	473.28	Joback Method
cpg	245.40	J/mol×K	506.88	Joback Method
cpg	258.09	J/mol×K	540.48	Joback Method
cpg	270.09	J/mol×K	574.07	Joback Method
cpg	281.42	J/mol×K	607.67	Joback Method
dvisc	0.0056425	Pa×s	193.34	Joback Method
dvisc	0.0023119	Pa×s	228.80	Joback Method
dvisc	0.0012036	Pa×s	264.26	Joback Method
dvisc	0.0007312	Pa×s	299.71	Joback Method
dvisc	0.0004936	Pa×s	335.17	Joback Method
dvisc	0.0003593	Pa×s	370.63	Joback Method
dvisc	0.0002764	Pa×s	406.09	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=C1462073&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume