Cyclopentene, 3-(2-methylpropyl)-

Inchi: InChI=1S/C9H16/c1-8(2)7-9-5-3-4-6-9/h3,5,8-9H,4,6-7H2,1-2H3
InchiKey: VEJUMQITLZVKQQ-UHFFFAOYSA-N
Formula: C9H16
SMILES: CC(C)CC1C=CCC1
Mol. weight [g/mol]: 124.22
CAS: 37689-12-6

Physical Properties

Property code	Value	Unit	Source
gf	88.97	kJ/mol	Joback Method
hf	-116.11	kJ/mol	Joback Method
hfus	10.70	kJ/mol	Joback Method
hvap	35.79	kJ/mol	Joback Method
log10ws	-2.85		Crippen Method
logp	2.999		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2896.73	kPa	Joback Method
rinpol	881.00		NIST Webbook
rinpol	881.00		NIST Webbook
rinpol	874.00		NIST Webbook
rinpol	879.00		NIST Webbook
rinpol	878.80		NIST Webbook
rinpol	874.50		NIST Webbook
ripol	984.00		NIST Webbook
ripol	998.80		NIST Webbook
ripol	983.90		NIST Webbook
ripol	999.00		NIST Webbook
ripol	998.80		NIST Webbook
ripol	983.90		NIST Webbook
ripol	991.30		NIST Webbook
ripol	991.00		NIST Webbook
ripol	991.30		NIST Webbook
ripol	999.00		NIST Webbook
tb	416.80 ± 1.00	K	NIST Webbook
tb	416.80 ± 1.00	K	NIST Webbook
tc	617.00	K	Joback Method
tf	187.85	K	Joback Method

vc	0.461	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.29	J/mol×K	419.32	Joback Method
cpg	318.20	J/mol×K	584.05	Joback Method
cpg	304.61	J/mol×K	551.11	Joback Method
cpg	290.26	J/mol×K	518.16	Joback Method
cpg	275.11	J/mol×K	485.21	Joback Method
cpg	259.13	J/mol×K	452.27	Joback Method
cpg	331.04	J/mol×K	617.00	Joback Method
dvisc	0.0002835	Pa×s	419.32	Joback Method
dvisc	0.0003620	Pa×s	380.74	Joback Method
dvisc	0.0004883	Pa×s	342.16	Joback Method
dvisc	0.0007107	Pa×s	303.58	Joback Method
dvisc	0.0011540	Pa×s	265.01	Joback Method
dvisc	0.0022103	Pa×s	226.43	Joback Method
dvisc	0.0055288	Pa×s	187.85	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C37689126&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume