(Z)-Cyclooctene, 3-methyl

Inchi: InChI=1S/C9H16/c1-9-7-5-3-2-4-6-8-9/h5,7,9H,2-4,6,8H2,1H3/b7-5-
InchiKey: VGMAAJKEQOXIML-ALCCZGGFSA-N
Formula: C9H16
SMILES: CC1C=CCCCCC1
Mol. weight [g/mol]: 124.22

Physical Properties

Property code	Value	Unit	Source
gf	55.11	kJ/mol	Joback Method
hf	-129.31	kJ/mol	Joback Method
hfus	7.92	kJ/mol	Joback Method
hvap	36.69	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	3117.52	kPa	Joback Method
rinpol	958.00		NIST Webbook
tb	432.57	K	Joback Method
tc	650.62	K	Joback Method
tf	192.29	K	Joback Method
vc	0.443	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	239.90	J/mol×K	432.57	Joback Method
cpg	259.46	J/mol×K	468.91	Joback Method
cpg	278.04	J/mol×K	505.25	Joback Method
cpg	295.66	J/mol×K	541.59	Joback Method
cpg	312.33	J/mol×K	577.93	Joback Method
cpg	328.06	J/mol×K	614.28	Joback Method
cpg	342.86	J/mol×K	650.62	Joback Method
dvisc	0.0212194	Pa×s	192.29	Joback Method
dvisc	0.0049975	Pa×s	232.34	Joback Method

dvisc	0.0018006	Pa×s	272.38	Joback Method
dvisc	0.0008429	Pa×s	312.43	Joback Method
dvisc	0.0004688	Pa×s	352.48	Joback Method
dvisc	0.0002939	Pa×s	392.52	Joback Method
dvisc	0.0002009	Pa×s	432.57	Joback Method

Sources

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=R2943&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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