

(Z)-Cyclooctene, 5-methyl

Inchi:	InChI=1S/C9H16/c1-9-7-5-3-2-4-6-8-9/h2-3,9H,4-8H2,1H3/b3-2-
InchiKey:	NDEUHGLZVZJEGK-IHWYPQMZSA-N
Formula:	C9H16
SMILES:	CC1CCC=CCCC1
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	974.00		NIST Webbook
tb	432.57	K	Joback Method
tc	650.62	K	Joback Method
tf	192.29	K	Joback Method
vc	0.443	m ³ /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	Paxs	192.29	Joback Method
dvisc	0.0049975	Paxs	232.34	Joback Method

dvisc	0.0018006	Paxs	272.38	Joback Method
dvisc	0.0008429	Paxs	312.43	Joback Method
dvisc	0.0004688	Paxs	352.48	Joback Method
dvisc	0.0002939	Paxs	392.52	Joback Method
dvisc	0.0002009	Paxs	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=R2969&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

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