

Cyclopentene, 5-methyl-1-propyl

Inchi:	InChI=1S/C9H16/c1-3-5-9-7-4-6-8(9)2/h7-8H,3-6H2,1-2H3
InchiKey:	AELVTZRADLGLSW-UHFFFAOYSA-N
Formula:	C9H16
SMILES:	CCCC1=CCCC1C
Mol. weight [g/mol]:	124.22

Physical Properties

Property code	Value	Unit	Source
gf	81.78	kJ/mol	Joback Method
hf	-122.30	kJ/mol	Joback Method
hfus	13.83	kJ/mol	Joback Method
hvap	36.84	kJ/mol	Joback Method
log10ws	-3.10		Crippen Method
logp	3.143		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2826.33	kPa	Joback Method
rinpol	891.00		NIST Webbook
rinpol	895.00		NIST Webbook
rinpol	892.00		NIST Webbook
rinpol	895.00		NIST Webbook
tb	424.74	K	Joback Method
tc	619.24	K	Joback Method
tf	215.37	K	Joback Method
vc	0.467	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	244.13	J/molxK	424.74	Joback Method
cpg	259.99	J/molxK	457.16	Joback Method
cpg	275.09	J/molxK	489.57	Joback Method
cpg	289.48	J/molxK	521.99	Joback Method
cpg	303.16	J/molxK	554.41	Joback Method
cpg	316.16	J/molxK	586.82	Joback Method

cpg	328.51	J/mol×K	619.24	Joback Method
dvisc	0.0023089	Paxs	215.37	Joback Method
dvisc	0.0012713	Paxs	250.27	Joback Method
dvisc	0.0008100	Paxs	285.16	Joback Method
dvisc	0.0005694	Paxs	320.06	Joback Method
dvisc	0.0004290	Paxs	354.95	Joback Method
dvisc	0.0003400	Paxs	389.85	Joback Method
dvisc	0.0002800	Paxs	424.74	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R10810&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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