

Cyclopentene, 1-methyl-2-propyl

Inchi:	InChI=1S/C9H16/c1-3-5-9-7-4-6-8(9)2/h3-7H2,1-2H3
InchiKey:	YXPWZTOAXPIENE-UHFFFAOYSA-N
Formula:	C9H16
SMILES:	CCCC1=C(C)CCC1
Mol. weight [g/mol]:	124.22

Physical Properties

Property code	Value	Unit	Source
gf	79.86	kJ/mol	Joback Method
hf	-113.43	kJ/mol	Joback Method
hfus	12.37	kJ/mol	Joback Method
hvap	37.81	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	3.287		Crippen Method
mcvol	122.510	ml/mol	McGowan Method
pc	2881.21	kPa	Joback Method
rinpola	912.00		NIST Webbook
rinpola	909.00		NIST Webbook
rinpola	912.00		NIST Webbook
rinpola	909.00		NIST Webbook
rinpola	912.00		NIST Webbook
tb	434.39	K	Joback Method
tc	630.73	K	Joback Method
tf	232.13	K	Joback Method
vc	0.468	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	245.42	J/molxK	434.39	Joback Method
cpg	260.53	J/molxK	467.11	Joback Method
cpg	274.91	J/molxK	499.84	Joback Method
cpg	288.60	J/molxK	532.56	Joback Method
cpg	301.62	J/molxK	565.28	Joback Method

cpg	313.99	J/mol×K	598.00	Joback Method
cpg	325.74	J/mol×K	630.73	Joback Method
dvisc	0.0025573	Paxs	232.13	Joback Method
dvisc	0.0013884	Paxs	265.84	Joback Method
dvisc	0.0008648	Paxs	299.55	Joback Method
dvisc	0.0005928	Paxs	333.26	Joback Method
dvisc	0.0004356	Paxs	366.97	Joback Method
dvisc	0.0003371	Paxs	400.68	Joback Method
dvisc	0.0002715	Paxs	434.39	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R10806&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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