

Pentane, 2-cyclopropyl-

Other names:	1-Methylbutylcyclopropane
Inchi:	InChI=1S/C8H16/c1-3-4-7(2)8-5-6-8/h7-8H,3-6H2,1-2H3
InchiKey:	HDRPKFBKHPJRQK-UHFFFAOYSA-N
Formula:	C8H16
SMILES:	CCCC(C)C1CC1
Mol. weight [g/mol]:	112.21
CAS:	5458-16-2

Physical Properties

Property code	Value	Unit	Source
gf	74.79	kJ/mol	Joback Method
hf	-140.93	kJ/mol	Joback Method
hfus	11.09	kJ/mol	Joback Method
hvap	32.93	kJ/mol	Joback Method
log10ws	-2.58		Crippen Method
logp	2.833		Crippen Method
mcvol	112.720	ml/mol	McGowan Method
pc	2928.17	kPa	Joback Method
tb	390.89 ± 0.10	K	NIST Webbook
tc	570.46	K	Joback Method
tf	182.86	K	Joback Method
vc	0.434	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	216.39	J/mol×K	388.74	Joback Method
cpg	284.58	J/mol×K	540.17	Joback Method
cpg	272.31	J/mol×K	509.88	Joback Method
cpg	259.38	J/mol×K	479.60	Joback Method
cpg	245.77	J/mol×K	449.31	Joback Method
cpg	231.45	J/mol×K	419.03	Joback Method
cpg	296.23	J/mol×K	570.46	Joback Method
dvisc	0.0003461	Paxs	388.74	Joback Method

dvisc	0.0004004	Paxs	354.43	Joback Method
dvisc	0.0004780	Paxs	320.11	Joback Method
dvisc	0.0005954	Paxs	285.80	Joback Method
dvisc	0.0007875	Paxs	251.49	Joback Method
dvisc	0.0011378	Paxs	217.17	Joback Method
dvisc	0.0018874	Paxs	182.86	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5458162&Units=SI

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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