Cyclopropane, pentyl-

Other names:	Pentane, 1-cyclopropyl- Pentylcyclopropane 1-Cyclopropylpentane
Inchi:	InChI=1S/C8H16/c1-2-3-4-5-8-6-7-8/h8H,2-7H2,1H3
InchiKey:	SUBUEDOPXXGMKP-UHFFFAOYSA-N
Formula:	C8H16
SMILES:	CCCCCC1CC1
Mol. weight [g/mol]:	112.21
CAS:	2511-91-3

Physical Properties

Property code	Value	Unit	Source
chl	-5021.00	kJ/mol	NIST Webbook
gf	77.23	kJ/mol	Joback Method
hf	-135.65	kJ/mol	Joback Method
hfus	14.61	kJ/mol	Joback Method
hvap	33.31	kJ/mol	Joback Method
log10ws	-2.82		Crippen Method
logp	2.977		Crippen Method
mcvol	112.720	ml/mol	McGowan Method
pc	2902.98	kPa	Joback Method
rinpol	812.20		NIST Webbook
rinpol	813.00		NIST Webbook
rinpol	812.00		NIST Webbook
rinpol	813.40		NIST Webbook
tb	401.00 ± 1.00	K	NIST Webbook
tc	566.68	K	Joback Method
tf	197.86	K	Joback Method
vc	0.441	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	216.51	J/mol×K	389.18	Joback Method

cpg	231.13	J/mol×K	418.76	Joback Method
cpg	245.04	J/mol×K	448.35	Joback Method
cpg	258.29	J/mol×K	477.93	Joback Method
cpg	270.89	J/mol×K	507.51	Joback Method
cpg	282.87	J/mol×K	537.10	Joback Method
cpg	294.26	J/mol×K	566.68	Joback Method
dvisc	0.0013982	Pa×s	197.86	Joback Method
dvisc	0.0009521	Pa×s	229.75	Joback Method
dvisc	0.0007120	Pa×s	261.63	Joback Method
dvisc	0.0005671	Pa×s	293.52	Joback Method
dvisc	0.0004723	Pa×s	325.41	Joback Method
dvisc	0.0004064	Pa×s	357.29	Joback Method
dvisc	0.0003584	Pa×s	389.18	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C2511913&Units=SI

Legend

chl:	Standard liquid enthalpy of combustion
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