Cyclopentane, 2-propenyl-

Other names:	Cyclopentane, allyl- Allyl cyclopentane 1-Propene, 3-cyclopentyl- (2-Propenyl)cyclopentane 3-Cyclopentylpropene 3-Cyclopentyl-1-propene
Inchi:	InChI=1S/C8H14/c1-2-5-8-6-3-4-7-8/h2,8H,1,3-7H2
InchiKey:	NHIDGVQVYHCGEK-UHFFFAOYSA-N
Formula:	C8H14
SMILES:	C=CCC1CCCC1
Mol. weight [g/mol]:	110.20
CAS:	3524-75-2

Physical Properties

Property code	Value	Unit	Source
chl	-5083.02 ± 0.96	kJ/mol	NIST Webbook
gf	140.87	kJ/mol	Joback Method
hf	-22.54	kJ/mol	Joback Method
hfl	-66.00 ± 1.00	kJ/mol	NIST Webbook
hfus	9.13	kJ/mol	Joback Method
hvap	40.40 ± 0.20	kJ/mol	NIST Webbook
hvap	40.40 ± 0.30	kJ/mol	NIST Webbook
log10ws	-2.68		Crippen Method
logp	2.753		Crippen Method
mcvol	108.420	ml/mol	McGowan Method
pc	3213.68	kPa	Joback Method
rinpol	828.80		NIST Webbook
rinpol	828.80		NIST Webbook
tb	400.07 ± 0.20	K	NIST Webbook
tc	591.41	K	Joback Method
tf	162.45 ± 0.06	K	NIST Webbook
tf	162.65 ± 0.10	K	NIST Webbook
tf	162.56 ± 0.15	K	NIST Webbook
tf	162.48 ± 0.02	K	NIST Webbook
tf	162.46 ± 0.04	K	NIST Webbook
vc	0.406	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	198.71	J/mol×K	394.40	Joback Method
cpg	214.65	J/mol×K	427.23	Joback Method
cpg	229.76	J/mol×K	460.07	Joback Method
cpg	244.08	J/mol×K	492.90	Joback Method
cpg	257.65	J/mol×K	525.74	Joback Method
cpg	270.48	J/mol×K	558.57	Joback Method
cpg	282.60	J/mol×K	591.41	Joback Method
cpl	202.90	J/mol×K	298.15	NIST Webbook
dvisc	0.0036601	Pa×s	189.06	Joback Method
dvisc	0.0017510	Pa×s	223.28	Joback Method
dvisc	0.0010190	Pa×s	257.51	Joback Method
dvisc	0.0006734	Pa×s	291.73	Joback Method
dvisc	0.0004854	Pa×s	325.95	Joback Method
dvisc	0.0003724	Pa×s	360.18	Joback Method
dvisc	0.0002991	Pa×s	394.40	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	399.20	K	100.00	NIST Webbook

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=C3524752&Units=SI

Legend

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase 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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume