1-(2-Propenyl)cyclopentene

Other names: Cyclopentene,1-(2-propenyl)-
1-Allylcyclopentene-1
Inchi: InChI=1S/C8H12/c1-2-5-8-6-3-4-7-8/h2,6H,1,3-5,7H2
InchiKey: PHBGIFRCMRLXFK-UHFFFAOYSA-N
Formula: C8H12
SMILES: C=CCC1=CCCC1
Mol. weight [g/mol]: 108.18
CAS: 37689-19-3

Physical Properties

Property code	Value	Unit	Source
gf	168.91	kJ/mol	Joback Method
hf	44.11	kJ/mol	Joback Method
hfus	8.89	kJ/mol	Joback Method
hvap	34.25	kJ/mol	Joback Method
ie	8.60 ± 0.01	eV	NIST Webbook
log10ws	-2.77		Crippen Method
logp	2.673		Crippen Method
mcvol	104.120	ml/mol	McGowan Method
pc	3419.86	kPa	Joback Method
rinpol	812.00		NIST Webbook
rinpol	818.00		NIST Webbook
rinpol	812.50		NIST Webbook
rinpol	856.00		NIST Webbook
rinpol	851.00		NIST Webbook
rinpol	822.00		NIST Webbook
rinpol	822.00		NIST Webbook
rinpol	818.20		NIST Webbook
rinpol	821.60		NIST Webbook
rinpol	822.00		NIST Webbook
ripol	1020.00		NIST Webbook
ripol	1024.40		NIST Webbook
ripol	1018.80		NIST Webbook
ripol	1018.80		NIST Webbook
ripol	1024.40		NIST Webbook
ripol	1018.80		NIST Webbook
ripol	1011.50		NIST Webbook

ripol	1024.40		NIST Webbook
ripol	1020.00		NIST Webbook
ripol	1013.00		NIST Webbook
ripol	1007.00		NIST Webbook
ripol	1026.00		NIST Webbook
ripol	1020.00		NIST Webbook
ripol	1011.50		NIST Webbook
tb	403.21	K	Joback Method
tc	604.41	K	Joback Method
tf	206.58	K	Joback Method
vc	0.393	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	187.77	J/mol×K	403.21	Joback Method
cpg	249.77	J/mol×K	570.88	Joback Method
cpg	238.78	J/mol×K	537.34	Joback Method
cpg	227.11	J/mol×K	503.81	Joback Method
cpg	214.75	J/mol×K	470.28	Joback Method
cpg	201.65	J/mol×K	436.74	Joback Method
cpg	260.12	J/mol×K	604.41	Joback Method
dvisc	0.0002811	Pa×s	403.21	Joback Method
dvisc	0.0003508	Pa×s	370.44	Joback Method
dvisc	0.0004571	Pa×s	337.67	Joback Method
dvisc	0.0006304	Pa×s	304.89	Joback Method
dvisc	0.0009395	Pa×s	272.12	Joback Method
dvisc	0.0015618	Pa×s	239.35	Joback Method
dvisc	0.0030507	Pa×s	206.58	Joback Method

Sources

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=C37689193&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ie:	Ionization energy
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume