Cyclopentane, (1-methylethylidene)-

Inchi: InChI=1S/C8H14/c1-7(2)8-5-3-4-6-8/h3-6H2,1-2H3
InchiKey: RIYRLXGSAJWZRO-UHFFFAOYSA-N
Formula: C8H14
SMILES: CC(C)=C1CCCC1
Mol. weight [g/mol]: 110.20
CAS: 765-83-3

Physical Properties

Property code	Value	Unit	Source
gf	97.65	kJ/mol	Joback Method
hf	-61.39	kJ/mol	Joback Method
hfus	8.35	kJ/mol	Joback Method
hvap	34.84	kJ/mol	Joback Method
ie	8.34 ± 0.02	eV	NIST Webbook
log10ws	-2.92		Crippen Method
logp	2.897		Crippen Method
mcvol	108.420	ml/mol	McGowan Method
pc	3306.75	kPa	Joback Method
tb	409.40 ± 1.00	K	NIST Webbook
tb	408.00 ± 4.00	K	NIST Webbook
tc	613.95	K	Joback Method
tf	191.46	K	Joback Method
vc	0.409	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	201.98	J/mol×K	408.91	Joback Method
cpg	217.27	J/mol×K	443.08	Joback Method
cpg	231.71	J/mol×K	477.26	Joback Method
cpg	245.34	J/mol×K	511.43	Joback Method
cpg	258.22	J/mol×K	545.60	Joback Method
cpg	270.36	J/mol×K	579.78	Joback Method
cpg	281.81	J/mol×K	613.95	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C765833&Units=SI
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

Legend

cpg:	Ideal gas heat capacity
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume