Vinylcyclohexyl ether

Other names: Cyclohexane, (ethenyloxy)-
(vinyloxy)cyclohexane
Inchi: InChI=1S/C8H14O/c1-2-9-8-6-4-3-5-7-8/h2,8H,1,3-7H2
InchiKey: VGIYPVFBQRUBDD-UHFFFAOYSA-N
Formula: C8H14O
SMILES: C=COC1CCCCC1
Mol. weight [g/mol]: 126.20
CAS: 2182-55-0

Physical Properties

Property code	Value	Unit	Source
gf	23.77	kJ/mol	Joback Method
hf	-160.92	kJ/mol	Joback Method
hfus	8.22	kJ/mol	Joback Method
hvap	35.57	kJ/mol	Joback Method
log10ws	-2.61		Crippen Method
logp	2.479		Crippen Method
mcvol	114.290	ml/mol	McGowan Method
pc	3243.03	kPa	Joback Method
tb	420.90 ± 1.50	K	NIST Webbook
tc	625.75	K	Joback Method
tf	207.77	K	Joback Method
vc	0.415	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	223.04	J/mol×K	421.09	Joback Method
cpg	239.44	J/mol×K	455.20	Joback Method
cpg	255.07	J/mol×K	489.31	Joback Method
cpg	269.96	J/mol×K	523.42	Joback Method
cpg	284.12	J/mol×K	557.53	Joback Method
cpg	297.55	J/mol×K	591.64	Joback Method
cpg	310.27	J/mol×K	625.75	Joback Method

dvisc	0.0051010	Pa×s	207.77	Joback Method
dvisc	0.0021253	Pa×s	243.32	Joback Method
dvisc	0.0011070	Pa×s	278.88	Joback Method
dvisc	0.0006682	Pa×s	314.43	Joback Method
dvisc	0.0004470	Pa×s	349.98	Joback Method
dvisc	0.0003220	Pa×s	385.54	Joback Method
dvisc	0.0002451	Pa×s	421.09	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=C2182550&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