Oxirane, (methoxymethyl)-

Other names:	Glycidyl methyl ether
	Propane, 1,2-epoxy-3-methoxy-
	(Methoxymethyl)oxirane
	Glycidol methyl ether
	Methyl glycidyl ether
	1,2-Epoxy-3-methoxypropane
	3-Methoxy-1,2-epoxypropane
	3-Methoxypropylene oxide
	NSC 86950
	Oxirane, 2-(methoxymethyl)-
Inchi:	InChI=1S/C4H8O2/c1-5-2-4-3-6-4/h4H,2-3H2,1H3
InchiKey:	LKMJVFRMDSNFRT-UHFFFAOYSA-N
Formula:	C4H8O2
SMILES:	COCC1CO1
Mol. weight [g/mol]:	88.11
CAS:	930-37-0

Physical Properties

Property code	Value	Unit	Source
gf	-147.57	kJ/mol	Joback Method
hf	-317.31	kJ/mol	Joback Method
hfus	13.42	kJ/mol	Joback Method
hvap	31.33	kJ/mol	Joback Method
ie	9.50	eV	NIST Webbook
ie	10.08	eV	NIST Webbook
log10ws	0.32		Crippen Method
logp	0.032		Crippen Method
mcvol	68.100	ml/mol	McGowan Method
pc	4456.32	kPa	Joback Method
tb	389.70	K	NIST Webbook
tc	528.81	K	Joback Method
tf	201.58	K	Joback Method
vc	0.256	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	122.62	J/mol×K	347.03	Joback Method
cpg	131.33	J/mol×K	377.33	Joback Method
cpg	139.66	J/mol×K	407.62	Joback Method
cpg	147.63	J/mol×K	437.92	Joback Method
cpg	155.23	J/mol×K	468.22	Joback Method
cpg	162.49	J/mol×K	498.51	Joback Method
cpg	169.42	J/mol×K	528.81	Joback Method
dvisc	0.0009617	Pa×s	201.58	Joback Method
dvisc	0.0007290	Pa×s	225.82	Joback Method
dvisc	0.0005831	Pa×s	250.06	Joback Method
dvisc	0.0004852	Pa×s	274.30	Joback Method
dvisc	0.0004159	Pa×s	298.55	Joback Method
dvisc	0.0003649	Pa×s	322.79	Joback Method
dvisc	0.0003261	Pa×s	347.03	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=C930370&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
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