Oxirane, (ethoxymethyl)-

Other names:	Ethyl glycidyl ether
	Propane, 1,2-epoxy-3-ethoxy-
	(Ethoxymethyl)oxirane
	1,2-Epoxy-3-ethoxypropane
	3-Ethoxy-1,2-epoxypropane
	1,2-Epoxy-3-ethyloxy propane
	UN 2752
	NSC 71436
	Oxirane, 2-(ethoxymethyl)-
Inchi:	InChI=1S/C5H10O2/c1-2-6-3-5-4-7-5/h5H,2-4H2,1H3
InchiKey:	HQCSZRIVJVOYSU-UHFFFAOYSA-N
Formula:	C5H10O2
SMILES:	CCOCC1CO1
Mol. weight [g/mol]:	102.13
CAS:	4016-11-9

Physical Properties

Property code	Value	Unit	Source
gf	-139.15	kJ/mol	Joback Method
hf	-337.95	kJ/mol	Joback Method
hfl	-295.30 ± 2.10	kJ/mol	NIST Webbook
hfus	16.01	kJ/mol	Joback Method
hvap	33.56	kJ/mol	Joback Method
log10ws	-0.10		Crippen Method
logp	0.422		Crippen Method
mcvol	82.190	ml/mol	McGowan Method
pc	3935.71	kPa	Joback Method
rinpol	770.00		NIST Webbook
rinpol	770.00		NIST Webbook
tb	369.91	K	Joback Method
tc	551.25	K	Joback Method
tf	212.85	K	Joback Method
vc	0.311	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	156.63	J/mol×K	369.91	Joback Method
cpg	203.18	J/mol×K	521.03	Joback Method
cpg	194.70	J/mol×K	490.81	Joback Method
cpg	185.82	J/mol×K	460.58	Joback Method
cpg	176.52	J/mol×K	430.36	Joback Method
cpg	166.80	J/mol×K	400.13	Joback Method
cpg	211.27	J/mol×K	551.25	Joback Method
dvisc	0.0003642	Pa×s	369.91	Joback Method
dvisc	0.0004133	Pa×s	343.73	Joback Method
dvisc	0.0004789	Pa×s	317.56	Joback Method
dvisc	0.0005698	Pa×s	291.38	Joback Method
dvisc	0.0007016	Pa×s	265.20	Joback Method
dvisc	0.0009042	Pa×s	239.03	Joback Method
dvisc	0.0012403	Pa×s	212.85	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=C4016119&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
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume