Oxirane, [(1-methylethoxy)methyl]-

Other names:	Isopropyl glycidyl ether
	Propane, 1,2-epoxy-3-isopropoxy-
	(Isopropoxymethyl)oxirane
	Glycidyl isopropyl ether
	3-Isopropoxy-1,2-epoxypropane
	3-Isopropyloxypropylene oxide
	1,2-Epoxy-3-iso-propoxypropane
	2,3-Epoxypropyl isopropyl ether
	IGE
	NCI-C56439
	Isopropyl epoxypropyl ether
	NSC 4127
	NSC 46562
	Oxirane, 2-[(1-methylethoxy)methyl]-
Inchi:	InChI=1S/C6H12O2/c1-5(2)7-3-6-4-8-6/h5-6H,3-4H2,1-2H3
InchiKey:	NWLUZGJDEZBBRH-UHFFFAOYSA-N
Formula:	C6H12O2
SMILES:	CC(C)OCC1CO1
Mol. weight [g/mol]:	116.16
CAS:	4016-14-2

Physical Properties

Property code	Value	Unit	Source
chl	-3733.00 ± 1.20	kJ/mol	NIST Webbook
gf	-133.17	kJ/mol	Joback Method
hf	-299.40 ± 2.40	kJ/mol	NIST Webbook
hfl	-342.90 ± 1.20	kJ/mol	NIST Webbook
hfus	15.07	kJ/mol	Joback Method
hvap	43.50 ± 2.10	kJ/mol	NIST Webbook
hvap	43.50	kJ/mol	NIST Webbook
log10ws	-0.63		Crippen Method
logp	0.810		Crippen Method
mcvol	96.280	ml/mol	McGowan Method
pc	3534.66	kPa	Joback Method
tb	404.70	K	NIST Webbook
tc	577.19	K	Joback Method
tf	209.12	K	Joback Method

vc	0.361	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	193.05	J/mol×K	392.35	Joback Method
cpg	204.91	J/mol×K	423.16	Joback Method
cpg	216.24	J/mol×K	453.96	Joback Method
cpg	227.05	J/mol×K	484.77	Joback Method
cpg	237.37	J/mol×K	515.58	Joback Method
cpg	247.21	J/mol×K	546.38	Joback Method
cpg	256.58	J/mol×K	577.19	Joback Method
dvisc	0.0020011	Pa×s	209.12	Joback Method
dvisc	0.0012699	Pa×s	239.66	Joback Method
dvisc	0.0008931	Pa×s	270.20	Joback Method
dvisc	0.0006747	Pa×s	300.74	Joback Method
dvisc	0.0005367	Pa×s	331.27	Joback Method
dvisc	0.0004438	Pa×s	361.81	Joback Method
dvisc	0.0003779	Pa×s	392.35	Joback Method

Sources

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=C4016142&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chl:	Standard liquid enthalpy of combustion
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume