Oxirane, (butoxymethyl)-

Other names:	Propane, 1-butoxy-2,3-epoxy-
	Butyl glycidyl ether
	ERL 0810
	Glycidyl butyl ether
	1-Butoxy-2,3-epoxypropane
	2,3-Epoxypropyl butyl ether
	3-Butoxy-1,2-epoxypropane
	n-Butyl glycidyl ether
	Butyl 2,3-epoxypropyl ether
	BGE
	Ether, butyl glycidyl
	Ether, butyl 2,3-epoxypropyl
	Ageflex BGE
	Epirez 501
	Glycidyl n-butyl ether
	(Butoxymethyl)oxirane
	NSC 83413
	Oxirane, 2-(butoxymethyl)-
Inchi:	InChI=1S/C7H14O2/c1-2-3-4-8-5-7-6-9-7/h7H,2-6H2,1H3
InchiKey:	YSUQLAYJZDEMOT-UHFFFAOYSA-N
Formula:	C7H14O2
SMILES:	CCCCOCC1CO1
Mol. weight [g/mol]:	130.18
CAS:	2426-08-6

Physical Properties

Property code	Value	Unit	Source
chl	-4410.00 ± 3.00	kJ/mol	NIST Webbook
chl	-4410.00 ± 3.00	kJ/mol	NIST Webbook
gf	-122.31	kJ/mol	Joback Method
hf	-291.70 ± 3.00	kJ/mol	NIST Webbook
hf	-291.90 ± 2.70	kJ/mol	NIST Webbook
hf	-291.70 ± 3.00	kJ/mol	NIST Webbook
hfl	-345.00 ± 3.00	kJ/mol	NIST Webbook
hfl	-345.00 ± 3.00	kJ/mol	NIST Webbook
hfus	21.19	kJ/mol	Joback Method
hvap	53.33 ± 0.37	kJ/mol	NIST Webbook

ie	9.20	eV	NIST Webbook
ie	9.72	eV	NIST Webbook
log10ws	-0.93		Crippen Method
logp	1.202		Crippen Method
mcvol	110.370	ml/mol	McGowan Method
pc	3135.00	kPa	Joback Method
tb	438.20	K	NIST Webbook
tc	595.11	K	Joback Method
tf	235.39	K	Joback Method
vc	0.423	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	231.92	J/mol×K	415.67	Joback Method
cpg	244.60	J/mol×K	445.58	Joback Method
cpg	256.73	J/mol×K	475.48	Joback Method
cpg	268.33	J/mol×K	505.39	Joback Method
cpg	279.41	J/mol×K	535.30	Joback Method
cpg	289.99	J/mol×K	565.21	Joback Method
cpg	300.09	J/mol×K	595.11	Joback Method
dvisc	0.0017927	Pa×s	235.39	Joback Method
dvisc	0.0012186	Pa×s	265.44	Joback Method
dvisc	0.0008960	Pa×s	295.48	Joback Method
dvisc	0.0006973	Pa×s	325.53	Joback Method
dvisc	0.0005662	Pa×s	355.58	Joback Method
dvisc	0.0004748	Pa×s	385.62	Joback Method
dvisc	0.0004085	Pa×s	415.67	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2426086&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

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
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