Ethylene glycol diglycidyl ether

Other names:	Oxirane, 2,2'-[1,2-ethanediylbis(oxymethylene)]bis-
	Diglycidylethylene glycol
	Ethane, 1,2-bis(2,3-epoxypropoxy)-
	Ethylene diglycidyl ether
	Ethylene glycol bis(glycidyl ether)
	Ethylene glycol bis(2,3-epoxypropyl) ether
	Glycol diglycidyl ether
	1,2-Bis(glycidyloxy)ethane
	1,2-Bis(2,3-epoxypropoxy)ethane
	1,2-Diglycidyloxyethane
	1,2-Ethanediol diglycidyl ether
	Ethylenglykoldiglycidylether
	1,2:9,10-Diepoxy-4,7-dioxadecane
	NSC 54740
	2,2'-[ethylenebis(oxymethylene)]bisoxirane
Inchi:	InChI=1S/C8H14O4/c1(9-3-7-5-11-7)2-10-4-8-6-12-8/h7-8H,1-6H2
InchiKey:	AOBIOSPNXBMOAT-UHFFFAOYSA-N
Formula:	C8H14O4
SMILES:	C(COCC1CO1)OCC1CO1
Mol. weight [g/mol]:	174.19
CAS:	2224-15-9

Physical Properties

Property code	Value	Unit	Source
gf	-244.26	kJ/mol	Joback Method
hf	-591.29	kJ/mol	Joback Method
hfus	31.08	kJ/mol	Joback Method
hvap	47.07	kJ/mol	Joback Method
log10ws	0.47		Crippen Method
logp	-0.183		Crippen Method
mcvol	125.340	ml/mol	McGowan Method
pc	3163.27	kPa	Joback Method
tb	494.66	K	Joback Method
tc	685.94	K	Joback Method
tf	313.40	K	Joback Method
vc	0.475	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	313.92	J/mol×K	494.66	Joback Method
cpg	377.15	J/mol×K	654.06	Joback Method
cpg	365.83	J/mol×K	622.18	Joback Method
cpg	353.88	J/mol×K	590.30	Joback Method
cpg	341.26	J/mol×K	558.42	Joback Method
cpg	327.95	J/mol×K	526.54	Joback Method
cpg	387.86	J/mol×K	685.94	Joback Method
dvisc	0.0007974	Pa×s	494.66	Joback Method
dvisc	0.0008777	Pa×s	464.45	Joback Method
dvisc	0.0009792	Pa×s	434.24	Joback Method
dvisc	0.0011103	Pa×s	404.03	Joback Method
dvisc	0.0012848	Pa×s	373.82	Joback Method
dvisc	0.0015255	Pa×s	343.61	Joback Method
dvisc	0.0018722	Pa×s	313.40	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	385.20	K	0.50	NIST Webbook

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=C2224159&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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume