Oxirane, (propoxymethyl)-

Other names:	Propane, 1,2-epoxy-3-propoxy-
	Glycidyl propyl ether
	Propyl glycidyl ether
	(Propoxymethyl)oxirane
	1,2-Epoxy-3-propoxypropane
	Ether, 2,3-epoxypropyl propyl
Inchi:	InChI=1S/C6H12O2/c1-2-3-7-4-6-5-8-6/h6H,2-5H2,1H3
InchiKey:	CWNOEVURTVLUNV-UHFFFAOYSA-N
Formula:	C6H12O2
SMILES:	CCCOCC1CO1
Mol. weight [g/mol]:	116.16
CAS:	3126-95-2

Physical Properties

Property code	Value	Unit	Source
gf	-130.73	kJ/mol	Joback Method
hf	-272.60 ± 2.30	kJ/mol	NIST Webbook
hf	-271.40 ± 1.60	kJ/mol	NIST Webbook
hfl	-319.90 ± 1.50	kJ/mol	NIST Webbook
hfus	18.60	kJ/mol	Joback Method
hvap	48.54 ± 0.43	kJ/mol	NIST Webbook
log10ws	-0.52		Crippen Method
logp	0.812		Crippen Method
mcvol	96.280	ml/mol	McGowan Method
pc	3501.28	kPa	Joback Method
tb	392.79	K	Joback Method
tc	573.32	K	Joback Method
tf	224.12	K	Joback Method
vc	0.367	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	193.10	J/mol×K	392.79	Joback Method

cpg	204.59	J/mol×K	422.88	Joback Method
cpg	215.58	J/mol×K	452.97	Joback Method
cpg	226.09	J/mol×K	483.06	Joback Method
cpg	236.13	J/mol×K	513.15	Joback Method
cpg	245.71	J/mol×K	543.24	Joback Method
cpg	254.86	J/mol×K	573.32	Joback Method
dvisc	0.0015221	Pa×s	224.12	Joback Method
dvisc	0.0010701	Pa×s	252.23	Joback Method
dvisc	0.0008074	Pa×s	280.34	Joback Method
dvisc	0.0006413	Pa×s	308.46	Joback Method
dvisc	0.0005293	Pa×s	336.57	Joback Method
dvisc	0.0004500	Pa×s	364.68	Joback Method
dvisc	0.0003916	Pa×s	392.79	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3126952&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

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

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

tb: Normal Boiling Point Temperature

tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume