2-Propenoic acid, oxiranylmethyl ester

Other names:	Acrylic acid, 2,3-epoxypropyl ester
	Glycidyl acrylate
	Glycidyl propenate
	2,3-Epoxypropyl acrylate
	2,3-Epoxypropanol acrylate
	M 581
	Methacyclic acid, 2,3-epoxypropyl ester
	1-Propanol, 2,3-epoxy-, acrylate
	Acrylic acid glycidyl ester
	Glycidylester kyseliny akrylove
	2-Propenoic acid, 2-oxiranylmethyl ester
	NSC 24151
Inchi:	InChI=1S/C6H8O3/c1-2-6(7)9-4-5-3-8-5/h2,5H,1,3-4H2
InchiKey:	RPQRDASANLAFCM-UHFFFAOYSA-N
Formula:	C6H8O3
SMILES:	C=CC(=O)OCC1CO1
Mol. weight [g/mol]:	128.13
CAS:	106-90-1

Physical Properties

Property code	Value	Unit	Source
gf	-171.81	kJ/mol	Joback Method
hf	-345.74	kJ/mol	Joback Method
hfus	18.92	kJ/mol	Joback Method
hvap	41.86	kJ/mol	Joback Method
log10ws	-0.14		Crippen Method
logp	0.114		Crippen Method
mcvol	93.550	ml/mol	McGowan Method
pc	3980.54	kPa	Joback Method
tb	443.34	K	Joback Method
tc	640.22	K	Joback Method
tf	272.29	K	Joback Method
vc	0.354	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	195.10	J/mol×K	443.34	Joback Method
cpg	205.17	J/mol×K	476.15	Joback Method
cpg	214.70	J/mol×K	508.97	Joback Method
cpg	223.71	J/mol×K	541.78	Joback Method
cpg	232.21	J/mol×K	574.59	Joback Method
cpg	240.24	J/mol×K	607.41	Joback Method
cpg	247.81	J/mol×K	640.22	Joback Method
dvisc	0.0018399	Pa×s	272.29	Joback Method
dvisc	0.0013500	Pa×s	300.80	Joback Method
dvisc	0.0010450	Pa×s	329.31	Joback Method
dvisc	0.0008427	Pa×s	357.81	Joback Method
dvisc	0.0007014	Pa×s	386.32	Joback Method
dvisc	0.0005988	Pa×s	414.83	Joback Method
dvisc	0.0005217	Pa×s	443.34	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	388.20	K	10.00	NIST Webbook

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C106901&Units=SI

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