3-Allyloxy-1,2 propanediol

Other names:	Glycerol-1-allyl ether
	Allyl-«alpha»-glyceryl ether
	Glycerol-«alpha»-allyl ether
	Glycerol «alpha»-monoallyl ether
	1,2-Propanediol, 3-(2-propenyloxy)-
	Ether, allyl glyceryl
	1-Allyloxy-2,3-propanediol
	1,2-Propanediol, 3-(allyloxy)-
	3-(Allyloxy)propanediol
	3-(2-Propenyloxy)-1,2-propanediol
	«alpha»-Allyl glycerol ether
	Glycerol 1-monoallyl ether
	Glycerin 1-allyl ether
	1,2-Propanediol, 3-(2-propen-1-yloxy)-
	NSC 59722
	3-(allyloxy)propane-1,2-diol
Inchi:	InChI=1S/C6H12O3/c1-2-3-9-5-6(8)4-7/h2,6-8H,1,3-5H2
InchiKey:	PAKCOSURAUIXFG-UHFFFAOYSA-N
Formula:	C6H12O3
SMILES:	C=CCOCC(O)CO
Mol. weight [g/mol]:	132.16
CAS:	123-34-2

Physical Properties

Property code	Value	Unit	Source
gf	-293.60	kJ/mol	Joback Method
hf	-483.70	kJ/mol	Joback Method
hfus	15.86	kJ/mol	Joback Method
hvap	63.66	kJ/mol	Joback Method
log10ws	0.09		Crippen Method
logp	-0.458		Crippen Method
mcvol	108.710	ml/mol	McGowan Method
pc	4021.02	kPa	Joback Method
tb	539.70	K	Joback Method
tc	702.44	K	Joback Method
tf	284.49	K	Joback Method
vc	0.403	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	302.48	J/mol×K	702.44	Joback Method
cpg	295.95	J/mol×K	675.32	Joback Method
cpg	289.15	J/mol×K	648.20	Joback Method
cpg	282.05	J/mol×K	621.07	Joback Method
cpg	274.66	J/mol×K	593.95	Joback Method
cpg	266.97	J/mol×K	566.82	Joback Method
cpg	258.97	J/mol×K	539.70	Joback Method
dvisc	0.0812743	Pa×s	284.49	Joback Method
dvisc	0.0000533	Pa×s	539.70	Joback Method
dvisc	0.0001073	Pa×s	497.17	Joback Method
dvisc	0.0002460	Pa×s	454.63	Joback Method
dvisc	0.0006693	Pa×s	412.10	Joback Method
dvisc	0.0022935	Pa×s	369.56	Joback Method
dvisc	0.0108257	Pa×s	327.03	Joback Method
hvapt	74.70	kJ/mol	353.00	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	415.20	K	3.70	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C123342&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
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
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