diacrylate of tri-propoxylated glycerol (Acrylic acid 2-{2-acryloyloxy-3-[2-(2-hydroxy-propoxy)-propoxy]-propyl ester)

Inchi: InChI=1S/C18H30O8/c1-6-17(20)25-12-16(26-18(21)7-2)11-22-9-14(4)24-10-15(5)23-8-13(3)19/h6-7,13-16,19H,1-2,8-12H2,3-5H3

InchiKey: WLTUHKPTOYVFBJ-UHFFFAOYSA-N

Formula: C18H30O8

SMILES: C=CC(=O)OCC(COCC(C)OCC(C)OCC(C)O)OC(=O)C=C

Mol. weight [g/mol]: 374.43

Physical Properties

Property code	Value	Unit	Source
gf	-653.06	kJ/mol	Joback Method
hf	-1223.60	kJ/mol	Joback Method
hfus	38.95	kJ/mol	Joback Method
hvap	94.99	kJ/mol	Joback Method
log10ws	-1.76		Crippen Method
logp	1.021		Crippen Method
mcvol	294.240	ml/mol	McGowan Method
pc	1374.80	kPa	Joback Method
rinpol	2222.00		NIST Webbook
tb	914.86	K	Joback Method
tc	1120.05	K	Joback Method
tf	500.93	K	Joback Method
vc	1.103	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	951.14	J/mol×K	914.86	Joback Method
cpg	1005.05	J/mol×K	1085.85	Joback Method
cpg	997.04	J/mol×K	1051.66	Joback Method
cpg	987.64	J/mol×K	1017.46	Joback Method
cpg	976.85	J/mol×K	983.26	Joback Method
cpg	964.68	J/mol×K	949.06	Joback Method
cpg	1011.64	J/mol×K	1120.05	Joback Method
dvisc	0.0000033	Pa×s	914.86	Joback Method
dvisc	0.0000050	Pa×s	845.87	Joback Method

dvisc	0.0000084	Pa×s	776.88	Joback Method
dvisc	0.0000154	Pa×s	707.89	Joback Method
dvisc	0.0000323	Pa×s	638.91	Joback Method
dvisc	0.0000809	Pa×s	569.92	Joback Method
dvisc	0.0002612	Pa×s	500.93	Joback Method

Sources

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=R508342&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume