dipropoxylated glycerol diacrylate (Acrylic acid 2-acryloyloxy-3-[2-(2-hydroxy-propoxy)-propoxy]-ester)

Inchi: InChI=1S/C15H24O7/c1-5-14(17)21-10-13(22-15(18)6-2)9-19-8-12(4)20-7-11(3)16/h5-6,11,13,16H,1-2,7-10H2,3-4H3

InchiKey: QGPDPPZHEQKKDU-UHFFFAOYSA-N

Formula: C15H24O7

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

Mol. weight [g/mol]: 316.35

Physical Properties

Property code	Value	Unit	Source
gf	-570.88	kJ/mol	Joback Method
hf	-1024.18	kJ/mol	Joback Method
hfus	33.51	kJ/mol	Joback Method
hvap	86.29	kJ/mol	Joback Method
log10ws	-1.31		Crippen Method
logp	0.616		Crippen Method
mcvol	246.100	ml/mol	McGowan Method
pc	1736.11	kPa	Joback Method
rinpol	1971.00		NIST Webbook
tb	824.24	K	Joback Method
tc	1014.15	K	Joback Method
tf	459.89	K	Joback Method
vc	0.922	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	748.57	J/mol×K	824.24	Joback Method
cpg	761.50	J/mol×K	855.89	Joback Method
cpg	773.49	J/mol×K	887.54	Joback Method
cpg	784.55	J/mol×K	919.20	Joback Method
cpg	794.67	J/mol×K	950.85	Joback Method
cpg	803.84	J/mol×K	982.50	Joback Method
cpg	812.05	J/mol×K	1014.15	Joback Method
dvisc	0.0006113	Pa×s	459.89	Joback Method
dvisc	0.0001999	Pa×s	520.62	Joback Method

dvisc	0.0000826	Pa×s	581.34	Joback Method
dvisc	0.0000403	Pa×s	642.07	Joback Method
dvisc	0.0000223	Pa×s	702.79	Joback Method
dvisc	0.0000135	Pa×s	763.51	Joback Method
dvisc	0.0000088	Pa×s	824.24	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R508406&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

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

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