tri-ethoxylated trimethylol propane triacrylate (Acrylic acid 2-{2-[2-(2-acryloyloxy-ethoxy)-ethoxy]-ethoxymeth ester)

Inchi: InChI=1S/C21H32O9/c1-5-18(22)28-13-11-25-9-10-26-15-21(8-4,17-30-20(24)7-3)16-27

InchiKey: OAPJNZXPMPKDSD-UHFFFAOYSA-N

Formula: C21H32O9

SMILES: C=CC(=O)OCCOCCOCC(CC)(COCCOC(=O)C=C)COC(=O)C=C

Mol. weight [g/mol]: 428.47

Physical Properties

Property code	Value	Unit	Source
gf	-624.46	kJ/mol	Joback Method
hf	-1240.29	kJ/mol	Joback Method
hfus	50.82	kJ/mol	Joback Method
hvap	93.73	kJ/mol	Joback Method
log10ws	-1.78		Crippen Method
logp	1.620		Crippen Method
mcvol	333.780	ml/mol	McGowan Method
pc	1109.63	kPa	Joback Method
rinpol	2611.00		NIST Webbook
tb	962.82	K	Joback Method
tc	1179.07	K	Joback Method
tf	606.74	K	Joback Method
vc	1.270	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1082.94	J/mol×K	962.82	Joback Method
cpg	1096.33	J/mol×K	998.86	Joback Method
cpg	1108.13	J/mol×K	1034.90	Joback Method
cpg	1118.32	J/mol×K	1070.95	Joback Method
cpg	1126.92	J/mol×K	1106.99	Joback Method
cpg	1133.92	J/mol×K	1143.03	Joback Method
cpg	1139.33	J/mol×K	1179.07	Joback Method
dvisc	0.0001255	Pa×s	606.74	Joback Method
dvisc	0.0000718	Pa×s	666.09	Joback Method

dvisc	0.0000450	Pa×s	725.43	Joback Method
dvisc	0.0000303	Pa×s	784.78	Joback Method
dvisc	0.0000215	Pa×s	844.13	Joback Method
dvisc	0.0000160	Pa×s	903.47	Joback Method
dvisc	0.0000123	Pa×s	962.82	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=R508619&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