EO-TMPTA (Acrylic acid 2-(2-acryloyloxy-ethoxymethyl)-2-acryloyloxymetl ester)

Inchi: InChI=1S/C17H24O7/c1-5-14(18)22-10-9-21-11-17(8-4,12-23-15(19)6-2)13-24-16(20)7-3

InchiKey: XWEHZSCNTYFGKO-UHFFFAOYSA-N

Formula: C17H24O7

SMILES: C=CC(=O)OCCOCC(CC)(COC(=O)C=C)COC(=O)C=C

Mol. weight [g/mol]: 340.37

Physical Properties

Property code	Value	Unit	Source
gf	-448.14	kJ/mol	Joback Method
hf	-893.29	kJ/mol	Joback Method
hfus	38.08	kJ/mol	Joback Method
hvap	80.01	kJ/mol	Joback Method
log10ws	-1.93		Crippen Method
logp	1.587		Crippen Method
mcvol	265.680	ml/mol	McGowan Method
pc	1497.67	kPa	Joback Method
rinpol	2085.00		NIST Webbook
rinpol	2085.00		NIST Webbook
rinpol	2085.00		NIST Webbook
tb	826.46	K	Joback Method
tc	1023.00	K	Joback Method
tf	517.20	K	Joback Method
vc	1.010	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	792.77	J/mol×K	826.46	Joback Method
cpg	806.31	J/mol×K	859.22	Joback Method
cpg	818.86	J/mol×K	891.97	Joback Method
cpg	830.43	J/mol×K	924.73	Joback Method
cpg	841.03	J/mol×K	957.49	Joback Method
cpg	850.67	J/mol×K	990.25	Joback Method
cpg	859.39	J/mol×K	1023.00	Joback Method

dvisc	0.0004263	Pa×s	517.20	Joback Method
dvisc	0.0002440	Pa×s	568.74	Joback Method
dvisc	0.0001533	Pa×s	620.29	Joback Method
dvisc	0.0001034	Pa×s	671.83	Joback Method
dvisc	0.0000738	Pa×s	723.37	Joback Method
dvisc	0.0000551	Pa×s	774.92	Joback Method
dvisc	0.0000426	Pa×s	826.46	Joback Method

Sources

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=R508466&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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