di- TMPTA (Di -Trimethylol propane tetraacrylate)

Inchi: InChI=1S/C24H34O9/c1-7-19(25)30-15-23(11-5,16-31-20(26)8-2)13-29-14-24(12-6,17-32

InchiKey: XRMBQHTWUBGQDN-UHFFFAOYSA-N

Formula: C24H34O9

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

Mol. weight [g/mol]: 466.52

Physical Properties

Property code	Value	Unit	Source
gf	-532.44	kJ/mol	Joback Method
hf	-1165.89	kJ/mol	Joback Method
hfus	50.30	kJ/mol	Joback Method
hvap	102.78	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	2.713		Crippen Method
mcvol	367.450	ml/mol	McGowan Method
pc	1008.45	kPa	Joback Method
rinpol	2652.00		NIST Webbook
tb	1056.36	K	Joback Method
tc	1296.23	K	Joback Method
tf	668.91	K	Joback Method
vc	1.395	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1215.00	J/mol×K	1056.36	Joback Method
cpg	1227.18	J/mol×K	1096.34	Joback Method
cpg	1237.74	J/mol×K	1136.32	Joback Method
cpg	1246.77	J/mol×K	1176.29	Joback Method
cpg	1254.32	J/mol×K	1216.27	Joback Method
cpg	1260.47	J/mol×K	1256.25	Joback Method
cpg	1265.29	J/mol×K	1296.23	Joback Method
dvisc	0.0000853	Pa×s	668.91	Joback Method
dvisc	0.0000479	Pa×s	733.49	Joback Method

dvisc	0.0000295	Pa×s	798.06	Joback Method
dvisc	0.0000196	Pa×s	862.63	Joback Method
dvisc	0.0000137	Pa×s	927.21	Joback Method
dvisc	0.0000101	Pa×s	991.79	Joback Method
dvisc	0.0000077	Pa×s	1056.36	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R508446&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