tetra-Propoxylated neopentyl glycol diacrylate

Inchi: InChI=1S/C23H40O8/c1-9-21(24)30-19(5)13-28-17(3)11-26-15-23(7,8)16-27-12-18(4)29-
InchiKey: PXIOSOYKTJVFOC-UHFFFAOYSA-N
Formula: C23H40O8
SMILES: C=CC(=O)OC(C)COC(C)COCC(C)(C)COCC(C)OCC(C)OC(=O)C=C
Mol. weight [g/mol]: 444.56

Physical Properties

Property code	Value	Unit	Source
gf	-576.30	kJ/mol	Joback Method
hf	-1315.54	kJ/mol	Joback Method
hfus	41.59	kJ/mol	Joback Method
hvap	90.56	kJ/mol	Joback Method
log10ws	-3.44		Crippen Method
logp	3.091		Crippen Method
mcvol	364.690	ml/mol	McGowan Method
pc	936.92	kPa	Joback Method
rinpol	2392.00		NIST Webbook
rinpol	2392.00		NIST Webbook
tb	956.27	K	Joback Method
tc	1170.99	K	Joback Method
tf	521.11	K	Joback Method
vc	1.371	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1222.07	J/mol×K	956.27	Joback Method
cpg	1238.21	J/mol×K	992.06	Joback Method
cpg	1252.58	J/mol×K	1027.84	Joback Method
cpg	1265.18	J/mol×K	1063.63	Joback Method
cpg	1276.01	J/mol×K	1099.41	Joback Method
cpg	1285.08	J/mol×K	1135.20	Joback Method
cpg	1292.39	J/mol×K	1170.99	Joback Method
dvisc	0.0001971	Pa×s	521.11	Joback Method

dvisc	0.0000778	Pa×s	593.64	Joback Method
dvisc	0.0000376	Pa×s	666.16	Joback Method
dvisc	0.0000210	Pa×s	738.69	Joback Method
dvisc	0.0000130	Pa×s	811.22	Joback Method
dvisc	0.0000087	Pa×s	883.74	Joback Method
dvisc	0.0000062	Pa×s	956.27	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R508580&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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