EO-HDDA (mono-ethoxylated 1,6 hexane diol diacrylate)

Inchi: InChI=1S/C14H22O5/c1-3-13(15)18-10-8-6-5-7-9-17-11-12-19-14(16)4-2/h3-4H,1-2,5-12

InchiKey: WRQBEQSIGLKAAO-UHFFFAOYSA-N

Formula: C14H22O5

SMILES: C=CC(=O)OCCCCCCOCCOC(=O)C=C

Mol. weight [g/mol]: 270.32

Physical Properties

Property code	Value	Unit	Source
gf	-330.16	kJ/mol	Joback Method
hf	-703.25	kJ/mol	Joback Method
hfus	36.22	kJ/mol	Joback Method
hvap	66.14	kJ/mol	Joback Method
log10ws	-2.20		Crippen Method
logp	2.022		Crippen Method
mcvol	220.270	ml/mol	McGowan Method
pc	1731.78	kPa	Joback Method
rinpol	1860.00		NIST Webbook
rinpol	1860.00		NIST Webbook
tb	688.08	K	Joback Method
tc	868.44	K	Joback Method
tf	410.57	K	Joback Method
vc	0.848	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	603.53	J/mol×K	688.08	Joback Method
cpg	668.31	J/mol×K	838.38	Joback Method
cpg	656.78	J/mol×K	808.32	Joback Method
cpg	644.54	J/mol×K	778.26	Joback Method
cpg	631.58	J/mol×K	748.20	Joback Method
cpg	617.91	J/mol×K	718.14	Joback Method
cpg	679.12	J/mol×K	868.44	Joback Method
dvisc	0.0001022	Pa×s	688.08	Joback Method

dvisc	0.0001308	Pa×s	641.83	Joback Method
dvisc	0.0001739	Pa×s	595.58	Joback Method
dvisc	0.0002427	Pa×s	549.33	Joback Method
dvisc	0.0003601	Pa×s	503.07	Joback Method
dvisc	0.0005787	Pa×s	456.82	Joback Method
dvisc	0.0010348	Pa×s	410.57	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=R508451&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