Hexamethylene diacrylate

Other names:	Hexamethylene glycol diacrylate
	Sartomer SR 238
	SR 238
	1,6-Hexamethylene diacrylate
	1,6-Hexanediol diacrylate
	HDDA
	HDODA
	2-Propenoic acid, 1,6-hexanediyl ester
	2-Propenoic acid, 1,1'-(1,6-hexanediyl) ester
	Acrylic acid, hexamethylene ester
	C 716
	Hexamethylene acrylate
	Kayarad HDDA
	NK Ester A-HD
	Photomer 4017
	Sartomer 238
	Setalux UV 2243
	Viscoat 230
Inchi:	InChI=1S/C12H18O4/c1-3-11(13)15-9-7-5-6-8-10-16-12(14)4-2/h3-4H,1-2,5-10H2
InchiKey:	FIHBHSQYSYVZQE-UHFFFAOYSA-N
Formula:	C12H18O4
SMILES:	C=CC(=O)OCCCCCCOC(=O)C=C
Mol. weight [g/mol]:	226.27
CAS:	13048-33-4

Physical Properties

Property code	Value	Unit	Source
gf	-242.00	kJ/mol	Joback Method
hf	-529.75	kJ/mol	Joback Method
hfus	29.85	kJ/mol	Joback Method
hvap	59.28	kJ/mol	Joback Method
log10ws	-2.28		Crippen Method
logp	2.005		Crippen Method
mcvol	186.220	ml/mol	McGowan Method
pc	2077.43	kPa	Joback Method
rinpol	1604.00		NIST Webbook
rinpol	1599.00		NIST Webbook

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rinpol	1604.00		NIST Webbook
rinpol	1599.00		NIST Webbook
tb	619.90	K	Joback Method
tc	802.73	K	Joback Method
tf	365.80	K	Joback Method
vc	0.718	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	472.49	J/mol×K	619.90	Joback Method
cpg	485.91	J/mol×K	650.37	Joback Method
cpg	498.71	J/mol×K	680.84	Joback Method
cpg	510.88	J/mol×K	711.31	Joback Method
cpg	522.43	J/mol×K	741.78	Joback Method
cpg	533.37	J/mol×K	772.26	Joback Method
cpg	543.71	J/mol×K	802.73	Joback Method
dvisc	0.0016394	Pa×s	365.80	Joback Method
dvisc	0.0009174	Pa×s	408.15	Joback Method
dvisc	0.0005726	Pa×s	450.50	Joback Method
dvisc	0.0003875	Pa×s	492.85	Joback Method
dvisc	0.0002790	Pa×s	535.20	Joback Method
dvisc	0.0002108	Pa×s	577.55	Joback Method
dvisc	0.0001655	Pa×s	619.90	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=C13048334&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