Hexapropylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C23H44O8/c1-9-10-25-11-17(2)26-12-18(3)27-13-19(4)28-14-20(5)29-15-21(6)

InchiKey: PUCZRBPORLLARC-UHFFFAOYSA-N

Formula: C23H44O8

SMILES: C=CCOCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OC(C)=O

Mol. weight [g/mol]: 448.59

Physical Properties

Property code	Value	Unit	Source
gf	-647.94	kJ/mol	Joback Method
hf	-1462.42	kJ/mol	Joback Method
hfus	42.82	kJ/mol	Joback Method
hvap	87.41	kJ/mol	Joback Method
log10ws	-3.36		Crippen Method
logp	3.166		Crippen Method
mcvol	373.290	ml/mol	McGowan Method
pc	869.14	kPa	Joback Method
rinpol	2398.00		NIST Webbook
rinpol	2395.00		NIST Webbook
rinpol	2398.00		NIST Webbook
rinpol	2400.00		NIST Webbook
rinpol	2400.00		NIST Webbook
rinpol	2397.00		NIST Webbook
rinpol	2396.00		NIST Webbook
rinpol	2394.00		NIST Webbook
rinpol	2400.00		NIST Webbook
rinpol	2399.00		NIST Webbook
rinpol	2400.00		NIST Webbook
rinpol	2396.00		NIST Webbook
tb	930.49	K	Joback Method
tc	1140.18	K	Joback Method
tf	462.75	K	Joback Method
vc	1.401	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1264.71	J/mol×K	930.49	Joback Method
cpg	1283.00	J/mol×K	965.44	Joback Method
cpg	1299.33	J/mol×K	1000.39	Joback Method
cpg	1313.64	J/mol×K	1035.33	Joback Method
cpg	1325.92	J/mol×K	1070.28	Joback Method
cpg	1336.14	J/mol×K	1105.23	Joback Method
cpg	1344.26	J/mol×K	1140.18	Joback Method
dvisc	0.0002877	Pa×s	462.75	Joback Method
dvisc	0.0000898	Pa×s	540.71	Joback Method
dvisc	0.0000376	Pa×s	618.66	Joback Method
dvisc	0.0000191	Pa×s	696.62	Joback Method
dvisc	0.0000111	Pa×s	774.58	Joback Method
dvisc	0.0000072	Pa×s	852.53	Joback Method
dvisc	0.0000050	Pa×s	930.49	Joback Method

Sources

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=R152142&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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