Hexaethylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C17H32O8/c1-3-4-19-5-6-20-7-8-21-9-10-22-11-12-23-13-14-24-15-16-25-17(2
InchiKey: MVWRFKHGSQZHQW-UHFFFAOYSA-N
Formula: C17H32O8
SMILES: C=CCOCCOCCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 364.43

Physical Properties

Property code	Value	Unit	Source
gf	-683.82	kJ/mol	Joback Method
hf	-1306.90	kJ/mol	Joback Method
hfus	48.42	kJ/mol	Joback Method
hvap	76.38	kJ/mol	Joback Method
log10ws	-0.18		Crippen Method
logp	0.835		Crippen Method
mcvol	288.750	ml/mol	McGowan Method
pc	1219.14	kPa	Joback Method
rinpol	2344.00		NIST Webbook
rinpol	2341.00		NIST Webbook
rinpol	2343.00		NIST Webbook
rinpol	2342.00		NIST Webbook
rinpol	2349.00		NIST Webbook
rinpol	2339.00		NIST Webbook
rinpol	2344.00		NIST Webbook
rinpol	2345.00		NIST Webbook
rinpol	2338.00		NIST Webbook
rinpol	2344.00		NIST Webbook
rinpol	2342.00		NIST Webbook
rinpol	2345.00		NIST Webbook
tb	795.85	K	Joback Method
tc	976.54	K	Joback Method
tf	485.13	K	Joback Method
vc	1.101	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	894.34	J/mol×K	795.85	Joback Method
cpg	911.12	J/mol×K	825.97	Joback Method
cpg	926.84	J/mol×K	856.08	Joback Method
cpg	941.47	J/mol×K	886.20	Joback Method
cpg	954.98	J/mol×K	916.31	Joback Method
cpg	967.34	J/mol×K	946.43	Joback Method
cpg	978.51	J/mol×K	976.54	Joback Method
dvisc	0.0002321	Pa×s	485.13	Joback Method
dvisc	0.0001292	Pa×s	536.92	Joback Method
dvisc	0.0000797	Pa×s	588.70	Joback Method
dvisc	0.0000532	Pa×s	640.49	Joback Method
dvisc	0.0000377	Pa×s	692.28	Joback Method
dvisc	0.0000280	Pa×s	744.06	Joback Method
dvisc	0.0000217	Pa×s	795.85	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152122&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