2-(2-(2-(2-(2-Butoxy-ethoxy)-ethoxy)-ethoxy)-ethoxy)-ethyl acetate

Other names: Hexaethylene glycol, butyl ether, acetate
Inchi: InChI=1S/C18H36O8/c1-3-4-5-20-6-7-21-8-9-22-10-11-23-12-13-24-14-15-25-16-17-26-1
InchiKey: DPTFJHAKQAAGMW-UHFFFAOYSA-N
Formula: C18H36O8
SMILES: CCCCOCCOCCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 380.47

Physical Properties

Property code	Value	Unit	Source
gf	-763.24	kJ/mol	Joback Method
hf	-1452.97	kJ/mol	Joback Method
hfus	52.29	kJ/mol	Joback Method
hvap	79.28	kJ/mol	Joback Method
log10ws	-0.74		Crippen Method
logp	1.449		Crippen Method
mcvol	307.140	ml/mol	McGowan Method
pc	1109.63	kPa	Joback Method
rinpol	2539.80		NIST Webbook
rinpol	2539.80		NIST Webbook
tb	822.05	K	Joback Method
tc	1006.70	K	Joback Method
tf	498.16	K	Joback Method
vc	1.175	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	981.29	J/mol×K	822.05	Joback Method
cpg	999.04	J/mol×K	852.83	Joback Method
cpg	1015.58	J/mol×K	883.60	Joback Method
cpg	1030.86	J/mol×K	914.38	Joback Method
cpg	1044.85	J/mol×K	945.15	Joback Method
cpg	1057.52	J/mol×K	975.93	Joback Method
cpg	1068.83	J/mol×K	1006.70	Joback Method

dvisc	0.0002034	Pa×s	498.16	Joback Method
dvisc	0.0001106	Pa×s	552.14	Joback Method
dvisc	0.0000670	Pa×s	606.12	Joback Method
dvisc	0.0000441	Pa×s	660.11	Joback Method
dvisc	0.0000309	Pa×s	714.09	Joback Method
dvisc	0.0000227	Pa×s	768.07	Joback Method
dvisc	0.0000174	Pa×s	822.05	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R188077&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