2-(2-(2-(2-Isobutoxy-ethoxy)-ethoxy)-ethoxy)-etho acetate

Inchi: InChI=1S/C16H32O7/c1-15(2)14-22-11-10-20-7-6-18-4-5-19-8-9-21-12-13-23-16(3)17/h1
InchiKey: JVKNVKGBSOTQNX-UHFFFAOYSA-N
Formula: C16H32O7
SMILES: CC(=O)OCCOCCOCCOCCOCCOCC(C)C
Mol. weight [g/mol]: 336.42

Physical Properties

Property code	Value	Unit	Source
gf	-677.52	kJ/mol	Joback Method
hf	-1284.75	kJ/mol	Joback Method
hfus	42.40	kJ/mol	Joback Method
hvap	72.03	kJ/mol	Joback Method
log10ws	-0.58		Crippen Method
logp	1.288		Crippen Method
mcvol	273.090	ml/mol	McGowan Method
pc	1289.29	kPa	Joback Method
rinpol	2214.60		NIST Webbook
tb	753.43	K	Joback Method
tc	929.17	K	Joback Method
tf	438.39	K	Joback Method
vc	1.040	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	831.01	J/mol×K	753.43	Joback Method
cpg	907.53	J/mol×K	899.88	Joback Method
cpg	894.17	J/mol×K	870.59	Joback Method
cpg	879.81	J/mol×K	841.30	Joback Method
cpg	864.49	J/mol×K	812.01	Joback Method
cpg	848.21	J/mol×K	782.72	Joback Method
cpg	919.87	J/mol×K	929.17	Joback Method
dvisc	0.0000290	Pa×s	753.43	Joback Method
dvisc	0.0000385	Pa×s	700.92	Joback Method

dvisc	0.0000533	Pa×s	648.42	Joback Method
dvisc	0.0000784	Pa×s	595.91	Joback Method
dvisc	0.0001241	Pa×s	543.40	Joback Method
dvisc	0.0002168	Pa×s	490.90	Joback Method
dvisc	0.0004329	Pa×s	438.39	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=R188275&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