2-(2-(2-(2-(2-Isobutoxy-ethoxy)-ethoxy)-ethoxy)-et

Inchi: InChI=1S/C16H34O7/c1-16(2)15-23-14-13-22-12-11-21-10-9-20-8-7-19-6-5-18-4-3-17/h1
InchiKey: YAXANHFNMATPNL-UHFFFAOYSA-N
Formula: C16H34O7
SMILES: CC(C)COCCOCCOCCOCCOCCOCCO
Mol. weight [g/mol]: 338.44

Physical Properties

Property code	Value	Unit	Source
gf	-685.42	kJ/mol	Joback Method
hf	-1324.40	kJ/mol	Joback Method
hfus	44.89	kJ/mol	Joback Method
hvap	81.96	kJ/mol	Joback Method
log10ws	-0.07		Crippen Method
logp	0.734		Crippen Method
mcvol	277.390	ml/mol	McGowan Method
pc	1316.56	kPa	Joback Method
rinpol	2380.00		NIST Webbook
rinpol	2380.00		NIST Webbook
tb	791.74	K	Joback Method
tc	969.67	K	Joback Method
tf	449.28	K	Joback Method
vc	1.052	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	878.90	J/mol×K	791.74	Joback Method
cpg	895.66	J/mol×K	821.39	Joback Method
cpg	911.43	J/mol×K	851.05	Joback Method
cpg	926.20	J/mol×K	880.70	Joback Method
cpg	939.94	J/mol×K	910.36	Joback Method
cpg	952.63	J/mol×K	940.01	Joback Method
cpg	964.24	J/mol×K	969.67	Joback Method
dvisc	0.0003347	Pa×s	449.28	Joback Method

dvisc	0.0001136	Pa×s	506.36	Joback Method
dvisc	0.0000480	Pa×s	563.43	Joback Method
dvisc	0.0000238	Pa×s	620.51	Joback Method
dvisc	0.0000132	Pa×s	677.59	Joback Method
dvisc	0.0000081	Pa×s	734.66	Joback Method
dvisc	0.0000053	Pa×s	791.74	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R188106&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