2-(2-(2-(2-(2-(2-nonyloxy-ethoxy)-ethoxy)-ethoxy)-ethoxy)-ethoxy)-acetate

Other names: Hexaethylene glycol, nonyl ether, acetate
Inchi: InChI=1S/C23H46O8/c1-3-4-5-6-7-8-9-10-25-11-12-26-13-14-27-15-16-28-17-18-29-19-2
InchiKey: ATMVTWVMEZFNPF-UHFFFAOYSA-N
Formula: C23H46O8
SMILES: CCCCCCCCCOCCOCCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 450.61

Physical Properties

Property code	Value	Unit	Source
gf	-721.14	kJ/mol	Joback Method
hf	-1556.17	kJ/mol	Joback Method
hfus	65.24	kJ/mol	Joback Method
hvap	90.41	kJ/mol	Joback Method
log10ws	-2.84		Crippen Method
logp	3.400		Crippen Method
mcvol	377.590	ml/mol	McGowan Method
pc	824.79	kPa	Joback Method
rinpol	3036.60		NIST Webbook
rinpol	3036.60		NIST Webbook
tb	936.45	K	Joback Method
tc	1155.37	K	Joback Method
tf	554.51	K	Joback Method
vc	1.456	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1291.63	J/mol×K	936.45	Joback Method
cpg	1311.27	J/mol×K	972.94	Joback Method
cpg	1328.75	J/mol×K	1009.42	Joback Method
cpg	1344.03	J/mol×K	1045.91	Joback Method
cpg	1357.07	J/mol×K	1082.40	Joback Method
cpg	1367.84	J/mol×K	1118.89	Joback Method
cpg	1376.29	J/mol×K	1155.37	Joback Method

dvisc	0.0001105	Pa×s	554.51	Joback Method
dvisc	0.0000569	Pa×s	618.17	Joback Method
dvisc	0.0000331	Pa×s	681.82	Joback Method
dvisc	0.0000212	Pa×s	745.48	Joback Method
dvisc	0.0000145	Pa×s	809.14	Joback Method
dvisc	0.0000105	Pa×s	872.79	Joback Method
dvisc	0.0000080	Pa×s	936.45	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=R184095&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