2-[2-[2-[2-[2-[2-[2-(2-Methoxyethoxy)ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethyl acetate

Other names: Octaethylene glycol monomethyl ether, acetate
3,6,9,12,15,18,21,24-Octaoxapentacos-1-yl acetate

Inchi: InChI=1S/C19H38O10/c1-19(20)29-18-17-28-16-15-27-14-13-26-12-11-25-10-9-24-8-7-2

InchiKey: TZLJTWZEEUMCQT-UHFFFAOYSA-N

Formula: C19H38O10

SMILES: COCCOCCOCCOCCOCCOCCOCCOCCOC(C)=O

Mol. weight [g/mol]: 426.50

Physical Properties

Property code	Value	Unit	Source
gf	-964.82	kJ/mol	Joback Method
hf	-1738.05	kJ/mol	Joback Method
hfus	57.26	kJ/mol	Joback Method
hvap	86.32	kJ/mol	Joback Method
log10ws	0.66		Crippen Method
logp	0.312		Crippen Method
mcvol	332.970	ml/mol	McGowan Method
pc	1019.43	kPa	Joback Method
rinpol	2745.20		NIST Webbook
tb	889.77	K	Joback Method
tc	1091.19	K	Joback Method
tf	553.89	K	Joback Method
vc	1.268	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1104.76	J/mol×K	889.77	Joback Method
cpg	1122.14	J/mol×K	923.34	Joback Method
cpg	1137.75	J/mol×K	956.91	Joback Method
cpg	1151.52	J/mol×K	990.48	Joback Method
cpg	1163.38	J/mol×K	1024.05	Joback Method
cpg	1173.26	J/mol×K	1057.62	Joback Method
cpg	1181.11	J/mol×K	1091.19	Joback Method

dvisc	0.0000849	Pa×s	553.89	Joback Method
dvisc	0.0000480	Pa×s	609.87	Joback Method
dvisc	0.0000299	Pa×s	665.85	Joback Method
dvisc	0.0000200	Pa×s	721.83	Joback Method
dvisc	0.0000142	Pa×s	777.81	Joback Method
dvisc	0.0000105	Pa×s	833.79	Joback Method
dvisc	0.0000081	Pa×s	889.77	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=U351917&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