2-[2-[2-[2-[2-[2-[2-[2-(2-Methoxyethoxy)ethoxy]eth

Inchi: InChI=1S/C19H40O10/c1-21-4-5-23-8-9-25-12-13-27-16-17-29-19-18-28-15-14-26-11-10

InchiKey: VVHAVLIDQNWEKF-UHFFFAOYSA-N

Formula: C19H40O10

SMILES: COCCOCCOCCOCCOCCOCCOCCOCCOCCO

Mol. weight [g/mol]: 428.51

CAS: 6048-68-6

Physical Properties

Property code	Value	Unit	Source
gf	-972.72	kJ/mol	Joback Method
hf	-1777.70	kJ/mol	Joback Method
hfus	59.75	kJ/mol	Joback Method
hvap	96.26	kJ/mol	Joback Method
log10ws	1.17		Crippen Method
logp	-0.242		Crippen Method
mcvol	337.270	ml/mol	McGowan Method
pc	1038.57	kPa	Joback Method
rinpol	2903.00		NIST Webbook
rinpol	2903.00		NIST Webbook
tb	928.08	K	Joback Method
tc	1149.50	K	Joback Method
tf	564.78	K	Joback Method
vc	1.280	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1152.68	J/mol×K	928.08	Joback Method
cpg	1217.09	J/mol×K	1112.60	Joback Method
cpg	1208.99	J/mol×K	1075.69	Joback Method
cpg	1198.42	J/mol×K	1038.79	Joback Method
cpg	1185.45	J/mol×K	1001.89	Joback Method
cpg	1170.18	J/mol×K	964.98	Joback Method
cpg	1222.63	J/mol×K	1149.50	Joback Method

dvisc	0.0000012	Pa×s	928.08	Joback Method
dvisc	0.0000017	Pa×s	867.53	Joback Method
dvisc	0.0000025	Pa×s	806.98	Joback Method
dvisc	0.0000042	Pa×s	746.43	Joback Method
dvisc	0.0000075	Pa×s	685.88	Joback Method
dvisc	0.0000150	Pa×s	625.33	Joback Method
dvisc	0.0000348	Pa×s	564.78	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=C6048686&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