1,3,6,9,12,15,17,20,23,26,29,32-Dodecaoxacyclo-te

Inchi: InChI=1S/C22H44O12/c1-3-24-5-9-27-13-17-31-21-33-19-15-29-11-7-26-8-12-30-16-20-
InchiKey: WYXQDRKSZZXFCT-UHFFFAOYSA-N
Formula: C22H44O12
SMILES: C1COCCOCCOCOCCOCCOCCOCCOCOCCOCCOCCO1
Mol. weight [g/mol]: 500.58
CAS: 74485-52-2

Physical Properties

Property code	Value	Unit	Source
gf	-1205.72	kJ/mol	Joback Method
hf	-2179.23	kJ/mol	Joback Method
hfus	80.45	kJ/mol	Joback Method
hvap	124.24	kJ/mol	Joback Method
log10ws	1.04		Crippen Method
logp	0.114		Crippen Method
mcvol	380.420	ml/mol	McGowan Method
pc	1600.00	kPa	Joback Method
tb	1169.94	K	Joback Method
tc	1470.12	K	Joback Method
tf	569.60	K	Joback Method
vc	1.230	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1411.02	J/mol×K	1169.94	Joback Method
cpg	1386.67	J/mol×K	1219.97	Joback Method
cpg	1351.14	J/mol×K	1270.00	Joback Method
cpg	1303.93	J/mol×K	1320.03	Joback Method
cpg	1244.55	J/mol×K	1370.06	Joback Method
cpg	1172.52	J/mol×K	1420.09	Joback Method
cpg	1087.35	J/mol×K	1470.12	Joback Method
dvisc	0.0000009	Pa×s	569.60	Joback Method
dvisc	4.6731876e-08	Pa×s	669.66	Joback Method

dvisc	5.0613876e-09	Pa×s	769.71	Joback Method
dvisc	9.1417327e-10	Pa×s	869.77	Joback Method
dvisc	2.3504297e-10	Pa×s	969.83	Joback Method
dvisc	7.7910987e-11	Pa×s	1069.88	Joback Method
dvisc	3.1194276e-11	Pa×s	1169.94	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C74485522&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume