

Hexadecane, 1,1'-oxybis-

Other names:

Hexadecyl ether
Dihexadecyl ether
17-Oxatritriacontane

Inchi:

InChI=1S/C32H66O/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-33-32-30-28-26-24-2

InchiKey:

FDCJDKXCCYFOCV-UHFFFAOYSA-N

Formula:

C32H66O

SMILES:

CCCCCCCCCCCCCCCCOCCCCCCCCCCCCCCCC

Mol. weight [g/mol]:

466.87

CAS:

4113-12-6

Physical Properties

Property code	Value	Unit	Source
gf	113.56	kJ/mol	Joback Method
hf	-836.03	kJ/mol	Joback Method
hfus	79.82	kJ/mol	Joback Method
hvap	89.24	kJ/mol	Joback Method
log10ws	-12.30		Crippen Method
logp	11.966		Crippen Method
mcvol	467.610	ml/mol	McGowan Method
pc	539.08	kPa	Joback Method
tb	953.98	K	Joback Method
tc	1192.42	K	Joback Method
tf	472.63	K	Joback Method
vc	1.845	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1654.49	J/molxK	953.98	Joback Method
cpg	1684.24	J/molxK	993.72	Joback Method
cpg	1711.87	J/molxK	1033.46	Joback Method
cpg	1737.51	J/molxK	1073.20	Joback Method
cpg	1761.29	J/molxK	1112.94	Joback Method
cpg	1783.31	J/molxK	1152.68	Joback Method

cpg	1803.69	J/mol×K	1192.42	Joback Method
dvisc	0.0005211	Paxs	472.63	Joback Method
dvisc	0.0001809	Paxs	552.86	Joback Method
dvisc	0.0000821	Paxs	633.08	Joback Method
dvisc	0.0000445	Paxs	713.31	Joback Method
dvisc	0.0000273	Paxs	793.53	Joback Method
dvisc	0.0000183	Paxs	873.76	Joback Method
dvisc	0.0000132	Paxs	953.98	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4113126&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/77-218-5/Hexadecane-1-1-oxybis.pdf>

Generated by Cheméo on 2024-04-27 07:16:04.824522696 +0000 UTC m=+16491413.745100017.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.