

Ether, hexyl pentyl

Other names:	Hexane, 1-(pentyloxy)- 6-oxadodecane
Inchi:	InChI=1S/C11H24O/c1-3-5-7-9-11-12-10-8-6-4-2/h3-11H2,1-2H3
InchiKey:	ABMGECRLBPHGSD-UHFFFAOYSA-N
Formula:	C11H24O
SMILES:	CCCCCOC(C)C
Mol. weight [g/mol]:	172.31
CAS:	32357-83-8

Physical Properties

Property code	Value	Unit	Source
gf	-63.26	kJ/mol	Joback Method
hf	-402.59	kJ/mol	Joback Method
hfus	25.43	kJ/mol	Joback Method
hvap	42.49	kJ/mol	Joback Method
log10ws	-3.51		Crippen Method
logp	3.773		Crippen Method
mvol	171.720	ml/mol	McGowan Method
pc	1905.24	kPa	Joback Method
tb	473.50	K	Joback Method
tc	635.31	K	Joback Method
tf	235.96	K	Joback Method
vc	0.669	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	388.04	J/molxK	473.50	Joback Method
cpg	403.69	J/molxK	500.47	Joback Method
cpg	418.81	J/molxK	527.44	Joback Method
cpg	433.40	J/molxK	554.41	Joback Method
cpg	447.47	J/molxK	581.37	Joback Method
cpg	461.04	J/molxK	608.34	Joback Method
cpg	474.10	J/molxK	635.31	Joback Method

dvisc	0.0043175	Paxs	235.96	Joback Method
dvisc	0.0017659	Paxs	275.55	Joback Method
dvisc	0.0009041	Paxs	315.14	Joback Method
dvisc	0.0005375	Paxs	354.73	Joback Method
dvisc	0.0003548	Paxs	394.32	Joback Method
dvisc	0.0002526	Paxs	433.91	Joback Method
dvisc	0.0001903	Paxs	473.50	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=C32357838&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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