Cyclohexane, 1,1'-oxybis-

Other names:	Cyclohexyl ether
	Dicyclohexyl ether
	1,1'-Oxybis(cyclohexane)
Inchi:	InChI=1S/C12H22O/c1-3-7-11(8-4-1)13-12-9-5-2-6-10-12/h11-12H,1-10H2
InchiKey:	OCDXZFSOHJRGIL-UHFFFAOYSA-N
Formula:	C12H22O
SMILES:	C1CCC(OC2CCCCC2)CC1
Mol. weight [g/mol]:	182.30
CAS:	4645-15-2

Physical Properties

Property code	Value	Unit	Source
gf	-5.94	kJ/mol	Joback Method
hf	-314.59	kJ/mol	Joback Method
hfus	11.69	kJ/mol	Joback Method
hvap	45.57	kJ/mol	Joback Method
log10ws	-3.95		Crippen Method
logp	3.668		Crippen Method
mcvol	164.090	ml/mol	McGowan Method
pc	2558.51	kPa	Joback Method
rinpol	1348.50		NIST Webbook
tb	535.48	K	Joback Method
tc	764.62	K	Joback Method
tf	261.99	K	Joback Method
vc	0.592	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	415.43	J/mol×K	535.48	Joback Method
cpg	526.61	J/mol×K	726.43	Joback Method
cpg	507.25	J/mol×K	688.24	Joback Method
cpg	486.48	J/mol×K	650.05	Joback Method
cpg	464.28	J/mol×K	611.86	Joback Method

cpg	440.61	J/mol×K	573.67	Joback Method
cpg	544.60	J/mol×K	764.62	Joback Method
dvisc	0.0002079	Pa×s	535.48	Joback Method
dvisc	0.0002848	Pa×s	489.90	Joback Method
dvisc	0.0004162	Pa×s	444.32	Joback Method
dvisc	0.0006632	Pa×s	398.74	Joback Method
dvisc	0.0011918	Pa×s	353.15	Joback Method
dvisc	0.0025484	Pa×s	307.57	Joback Method
dvisc	0.0070985	Pa×s	261.99	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4645152&Units=SI

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