Benzene, (cyclohexyloxy)-

Other names:	Ether, cyclohexyl phenyl
	Cyclohexyl phenyl ether
	Cyclohexyloxybenzene
	Phenyl cyclohexyl ether
Inchi:	InChI=1S/C12H16O/c1-3-7-11(8-4-1)13-12-9-5-2-6-10-12/h1,3-4,7-8,12H,2,5-6,9-10H2
InchiKey:	OSAOIDIGMBDXED-UHFFFAOYSA-N
Formula:	C12H16O
SMILES:	c1ccc(OC2CCCCC2)cc1
Mol. weight [g/mol]:	176.25
CAS:	2206-38-4

Physical Properties

Property code	Value	Unit	Source
gf	82.02	kJ/mol	Joback Method
hf	-132.38	kJ/mol	Joback Method
hfus	13.90	kJ/mol	Joback Method
hvap	47.42	kJ/mol	Joback Method
log10ws	-3.69		Crippen Method
logp	3.398		Crippen Method
mcvol	151.190	ml/mol	McGowan Method
pc	2918.68	kPa	Joback Method
tb	534.20	K	NIST Webbook
tc	780.10	K	Joback Method
tf	281.03	K	Joback Method
vc	0.550	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	360.09	J/mol×K	542.61	Joback Method
cpg	450.02	J/mol×K	740.52	Joback Method
cpg	434.59	J/mol×K	700.94	Joback Method
cpg	417.93	J/mol×K	661.36	Joback Method
cpg	399.98	J/mol×K	621.77	Joback Method

cpg	380.71	J/mol×K	582.19	Joback Method
cpg	464.26	J/mol×K	780.10	Joback Method
dvisc	0.0001873	Pa×s	542.61	Joback Method
dvisc	0.0002470	Pa×s	499.01	Joback Method
dvisc	0.0003436	Pa×s	455.42	Joback Method
dvisc	0.0005125	Pa×s	411.82	Joback Method
dvisc	0.0008404	Pa×s	368.22	Joback Method
dvisc	0.0015739	Pa×s	324.63	Joback Method
dvisc	0.0035807	Pa×s	281.03	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	401.20	K	2.00	NIST Webbook

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=C2206384&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

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