1,1'-Biphenyl, 2-phenoxy-

Other names:	Ether, 2-biphenylyl phenyl
	o-Diphenyl phenyl ether
	Phenoxy-2-diphenyl
	2-Biphenylyl phenyl ether
	2-Phenyloxybiphenyl
	2-Phenoxybiphenyl
	2-Biphenyl phenyl ether
	2-Phenoxydiphenyl
	2-Phenoxy-1,1'-biphenyl
	NSC 66280
Inchi:	InChI=1S/C18H14O/c1-3-9-15(10-4-1)17-13-7-8-14-18(17)19-16-11-5-2-6-12-16/h1-14H
InchiKey:	UHJWZORSTYATLW-UHFFFAOYSA-N
Formula:	C18H14O
SMILES:	c1ccc(Oc2ccccc2-c2ccccc2)cc1
Mol. weight [g/mol]:	246.30
CAS:	6738-04-1

Physical Properties

Property code	Value	Unit	Source
gf	323.28	kJ/mol	Joback Method
hf	151.05	kJ/mol	Joback Method
hfus	25.30	kJ/mol	Joback Method
hvap	65.56	kJ/mol	Joback Method
log10ws	-5.71		Crippen Method
logp	5.146		Crippen Method
mcvol	199.070	ml/mol	McGowan Method
pc	2537.93	kPa	Joback Method
tb	718.68	K	Joback Method
tc	983.76	K	Joback Method
tf	406.63	K	Joback Method
vc	0.738	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	522.30	J/mol×K	718.68	Joback Method
cpg	539.67	J/mol×K	762.86	Joback Method
cpg	555.42	J/mol×K	807.04	Joback Method
cpg	569.66	J/mol×K	851.22	Joback Method
cpg	582.49	J/mol×K	895.40	Joback Method
cpg	594.01	J/mol×K	939.58	Joback Method
cpg	604.34	J/mol×K	983.76	Joback Method
dvisc	0.0009987	Pa×s	406.63	Joback Method
dvisc	0.0005443	Pa×s	458.64	Joback Method
dvisc	0.0003357	Pa×s	510.65	Joback Method
dvisc	0.0002264	Pa×s	562.65	Joback Method
dvisc	0.0001632	Pa×s	614.66	Joback Method
dvisc	0.0001238	Pa×s	666.67	Joback Method
dvisc	0.0000978	Pa×s	718.68	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	473.70	K	1.90	NIST Webbook

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=C6738041&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume