3-Hydroxybiphenyl

Other names:	[1,1'-Biphenyl]-3-ol
	3-Biphenylol
	m-Hydroxybiphenyl
	m-Hydroxydiphenyl
	m-Phenylphenol
	Biphenyl-3-ol
	3-Phenylphenol
	3-Hydroxydiphenyl
	NSC 17588
	Phenol, m-phenyl-
Inchi:	InChI=1S/C12H10O/c13-12-8-4-7-11(9-12)10-5-2-1-3-6-10/h1-9,13H
InchiKey:	UBXYXCRCOKCZIT-UHFFFAOYSA-N
Formula:	C12H10O
SMILES:	Oc1cccc(-c2ccccc2)c1
Mol. weight [g/mol]:	170.21
CAS:	580-51-8

Physical Properties

Property code	Value	Unit	Source
chs	-6063.00	kJ/mol	NIST Webbook
gf	120.36	kJ/mol	Joback Method
hf	21.00	kJ/mol	NIST Webbook
hfs	-88.00	kJ/mol	NIST Webbook
hfus	20.70	kJ/mol	Joback Method
hsub	109.20	kJ/mol	NIST Webbook
hsub	109.00	kJ/mol	NIST Webbook
hvap	59.87	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	3.059		Crippen Method
mcvol	138.290	ml/mol	McGowan Method
pc	4114.41	kPa	Joback Method
rinpol	1709.00		NIST Webbook
rinpol	1704.00		NIST Webbook
rinpol	1677.00		NIST Webbook
rinpol	1709.00		NIST Webbook
rinpol	1704.00		NIST Webbook
rinpol	1677.00		NIST Webbook

tb	607.94	K	Joback Method
tc	868.51	K	Joback Method
tf	389.56	K	Joback Method
vc	0.458	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	329.32	J/mol×K	607.94	Joback Method
cpg	388.46	J/mol×K	825.08	Joback Method
cpg	378.51	J/mol×K	781.65	Joback Method
cpg	367.77	J/mol×K	738.23	Joback Method
cpg	356.10	J/mol×K	694.80	Joback Method
cpg	343.33	J/mol×K	651.37	Joback Method
cpg	397.79	J/mol×K	868.51	Joback Method
dvisc	0.0000320	Pa×s	607.94	Joback Method
dvisc	0.0000488	Pa×s	571.54	Joback Method
dvisc	0.0000788	Pa×s	535.15	Joback Method
dvisc	0.0001363	Pa×s	498.75	Joback Method
dvisc	0.0002570	Pa×s	462.35	Joback Method
dvisc	0.0005403	Pa×s	425.96	Joback Method
dvisc	0.0013048	Pa×s	389.56	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=C580518&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity

gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsub:	Enthalpy of sublimation 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