[1,1'-Biphenyl]-4,4'-diol

Other names:	4,4'-Biphenyldiol
	p-Dihydroxydiphenyl
	p,p'-Biphenol
	p,p'-Diphenol
	Antioxidant DOD
	ASM DOD
	Biphenyl-4,4'-diol
	DOD
	Phenol, p-(p-hydroxyphenyl)-
	4,4'-Biphenol
	4,4'-Dihydroxybiphenyl
	4,4'-Dihydroxydiphenyl
	para,para'-Biphenol
	USAF DO-30
	4,4'-Dioxydiphenyl
	p,p'-Dihydroxybiphenyl
	4,4'-Dihydroxy-1,1'-biphenyl
	4,4'-Bisphenol
	4,4'-Diphenol
	NSC 8711
	4,4-Dihydroxy biphenyl
Inchi:	InChI=1S/C12H10O2/c13-11-5-1-9(2-6-11)10-3-7-12(14)8-4-10/h1-8,13-14H
InchiKey:	VCCBEIPGXKNHFW-UHFFFAOYSA-N
Formula:	C12H10O2
SMILES:	Oc1ccc(-c2ccc(O)cc2)cc1
Mol. weight [g/mol]:	186.21
CAS:	92-88-6

Physical Properties

Property code	Value	Unit	Source
gf	-34.26	kJ/mol	Joback Method
hf	-172.57	kJ/mol	Joback Method
hfus	26.48	kJ/mol	Joback Method
hsub	143.00 ± 2.00	kJ/mol	NIST Webbook
hvap	72.89	kJ/mol	Joback Method
log10ws	-3.17		Crippen Method

logp	2.765		Crippen Method
mcvol	144.160	ml/mol	McGowan Method
pc	5029.93	kPa	Joback Method
rinpol	2046.00		NIST Webbook
rinpol	1979.00		NIST Webbook
ss	220.57	J/mol×K	NIST Webbook
tb	688.56	K	Joback Method
tc	956.80	K	Joback Method
tf	501.28	K	Joback Method
vc	0.423	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	426.49	J/mol×K	912.09	Joback Method
cpg	373.78	J/mol×K	688.56	Joback Method
cpg	385.57	J/mol×K	733.27	Joback Method
cpg	396.50	J/mol×K	777.97	Joback Method
cpg	406.80	J/mol×K	822.68	Joback Method
cpg	416.72	J/mol×K	867.39	Joback Method
cpg	436.36	J/mol×K	956.80	Joback Method
cps	224.31	J/mol×K	298.15	NIST Webbook
dvisc	0.0000021	Pa×s	688.56	Joback Method
dvisc	0.0000720	Pa×s	501.28	Joback Method
dvisc	0.0000335	Pa×s	532.49	Joback Method
dvisc	0.0000170	Pa×s	563.71	Joback Method
dvisc	0.0000093	Pa×s	594.92	Joback Method
dvisc	0.0000054	Pa×s	626.13	Joback Method
dvisc	0.0000033	Pa×s	657.35	Joback Method
hfust	43.05	kJ/mol	560.70	NIST Webbook
hsubt	138.60 ± 2.00	kJ/mol	371.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C92886&Units=SI

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

Legend

cpg:	Ideal gas heat capacity
cps:	Solid phase 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
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
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
ss:	Solid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume