[1,1'-Biphenyl]-2,4'-diol

Inchi: InChI=1S/C12H10O2/c13-10-7-5-9(6-8-10)11-3-1-2-4-12(11)14/h1-8,13-14H
InchiKey: JHOPNNNTBHXSHY-UHFFFAOYSA-N
Formula: C12H10O2
SMILES: Oc1ccc(-c2ccccc2O)cc1
Mol. weight [g/mol]: 186.21
CAS: 611-62-1

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
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	1820.00		NIST Webbook
rinpol	1820.00		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	373.78	J/mol×K	688.56	Joback Method
cpg	426.49	J/mol×K	912.09	Joback Method
cpg	416.72	J/mol×K	867.39	Joback Method
cpg	406.80	J/mol×K	822.68	Joback Method
cpg	396.50	J/mol×K	777.97	Joback Method
cpg	385.57	J/mol×K	733.27	Joback Method
cpg	436.36	J/mol×K	956.80	Joback Method

dvisc	0.0000021	Pa×s	688.56	Joback Method
dvisc	0.0000033	Pa×s	657.35	Joback Method
dvisc	0.0000054	Pa×s	626.13	Joback Method
dvisc	0.0000093	Pa×s	594.92	Joback Method
dvisc	0.0000170	Pa×s	563.71	Joback Method
dvisc	0.0000335	Pa×s	532.49	Joback Method
dvisc	0.0000720	Pa×s	501.28	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	481.20	K	1.50	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=C611621&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

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