meso-Hydrobenzoin

Other names:	meso-Stilbene glycol
	meso-1,2-Diphenyl-1,2-ethanediol
	meso-1,2-Diphenylethylene glycol
	Hydrobenzoin, meso-
	1,2-Ethanediol, 1,2-diphenyl-, (R*,S*)-
	1,2-Ethanediol, 1,2-diphenyl-, meso-
Inchi:	InChI=1S/C14H14O2/c15-13(11-7-3-1-4-8-11)14(16)12-9-5-2-6-10-12/h1-10,13-16H/t13-
InchiKey:	IHPDTPWNFBQHEB-OKILXGFUSA-N
Formula:	C14H14O2
SMILES:	OC(c1ccccc1)C(O)c1ccccc1
Mol. weight [g/mol]:	214.26
CAS:	579-43-1

Physical Properties

Property code	Value	Unit	Source
gf	13.30	kJ/mol	Joback Method
hf	-174.25	kJ/mol	Joback Method
hfus	21.23	kJ/mol	Joback Method
hvap	83.89	kJ/mol	Joback Method
log10ws	-3.33		Crippen Method
logp	2.454		Crippen Method
mcvol	172.340	ml/mol	McGowan Method
pc	3460.21	kPa	Joback Method
tb	756.56	K	Joback Method
tc	969.50	K	Joback Method
tf	392.02	K	Joback Method
vc	0.629	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	480.61	J/mol×K	756.56	Joback Method
cpg	491.87	J/mol×K	792.05	Joback Method
cpg	502.29	J/mol×K	827.54	Joback Method

cpg	511.94	J/mol×K	863.03	Joback Method
cpg	520.86	J/mol×K	898.52	Joback Method
cpg	529.13	J/mol×K	934.01	Joback Method
cpg	536.81	J/mol×K	969.50	Joback Method
dvisc	0.0041702	Pa×s	392.02	Joback Method
dvisc	0.0007008	Pa×s	452.78	Joback Method
dvisc	0.0001796	Pa×s	513.53	Joback Method
dvisc	0.0000614	Pa×s	574.29	Joback Method
dvisc	0.0000258	Pa×s	635.05	Joback Method
dvisc	0.0000126	Pa×s	695.80	Joback Method
dvisc	0.0000069	Pa×s	756.56	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C579431&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

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
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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