Benzeneethanol, «alpha»-phenyl-

Other names:	1,2-Diphenyl-1-hydroxyethane
	1,2-Diphenylethanol
	Benzylphenylcarbinol
	DL-1,2-diphenylethanol
	Ethanol, 1,2-diphenyl-
	«alpha»-Hydroxydibenzyl
	«alpha»-Phenylbenzeneethanol
	Â«alphaÂ»-Hydroxydibenzyl
	Â«alphaÂ»-Phenylbenzeneethanol
Inchi:	InChI=1S/C14H14O/c15-14(13-9-5-2-6-10-13)11-12-7-3-1-4-8-12/h1-10,14-15H,11H2
InchiKey:	GBGXVCNOKWAMIP-UHFFFAOYSA-N
Formula:	C14H14O
SMILES:	OC(Cc1ccccc1)c1ccccc1
Mol. weight [g/mol]:	198.26
CAS:	614-29-9

Physical Properties

Property code	Value	Unit	Source
gf	152.56	kJ/mol	Joback Method
hf	-16.74	kJ/mol	Joback Method
hfus	20.66	kJ/mol	Joback Method
hvap	67.60	kJ/mol	Joback Method
log10ws	-2.52		Aqueous Solubility Prediction Method
logp	2.963		Crippen Method
mcvol	166.470	ml/mol	McGowan Method
pc	3086.42	kPa	Joback Method
rinpol	1366.30		NIST Webbook
tb	664.82	K	Joback Method
tc	888.92	K	Joback Method
tf	326.65 ± 2.00	K	NIST Webbook
tf	340.00 ± 3.00	K	NIST Webbook
vc	0.617	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	429.17	J/mol×K	664.82	Joback Method
cpg	443.31	J/mol×K	702.17	Joback Method
cpg	456.38	J/mol×K	739.52	Joback Method
cpg	468.47	J/mol×K	776.87	Joback Method
cpg	479.63	J/mol×K	814.22	Joback Method
cpg	489.94	J/mol×K	851.57	Joback Method
cpg	499.46	J/mol×K	888.92	Joback Method
dvisc	0.0054968	Pa×s	346.20	Joback Method
dvisc	0.0014590	Pa×s	399.30	Joback Method
dvisc	0.0005287	Pa×s	452.41	Joback Method
dvisc	0.0002372	Pa×s	505.51	Joback Method
dvisc	0.0001239	Pa×s	558.61	Joback Method
dvisc	0.0000724	Pa×s	611.72	Joback Method
dvisc	0.0000461	Pa×s	664.82	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C614299&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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