Ethanol, 2-([1,1'-biphenyl]-2-yloxy)-

Other names:	«beta»-Hydroxyethyl ether of o-phenylphenol
	Ethanol, 2-(o-biphenylyloxy)-
	Ethanol, 2-(2-biphenylyloxy)-
	Ethyl alcohol, 2-(o-biphenylyloxy)-
	Ethyl alcohol, 2-(o-phenyl)phenoxy-
	2-(2-Biphenyloxy)ethanol
Inchi:	InChI=1S/C14H14O2/c15-10-11-16-14-9-5-4-8-13(14)12-6-2-1-3-7-12/h1-9,15H,10-11H2
InchiKey:	NOZAKUWNUGNDLI-UHFFFAOYSA-N
Formula:	C14H14O2
SMILES:	OCCOc1ccccc1-c1ccccc1
Mol. weight [g/mol]:	214.26
CAS:	7501-02-2

Physical Properties

Property code	Value	Unit	Source
gf	40.37	kJ/mol	Joback Method
hf	-155.15	kJ/mol	Joback Method
hfus	24.99	kJ/mol	Joback Method
hvap	71.06	kJ/mol	Joback Method
log10ws	-3.88		Crippen Method
logp	2.725		Crippen Method
mcvol	172.340	ml/mol	McGowan Method
pc	2953.69	kPa	Joback Method
tb	692.66	K	Joback Method
tc	910.69	K	Joback Method
tf	346.15 ± 1.00	K	NIST Webbook
vc	0.640	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	519.53	J/mol×K	910.69	Joback Method
cpg	510.49	J/mol×K	874.35	Joback Method
cpg	500.67	J/mol×K	838.01	Joback Method

cpg	490.04	J/mol×K	801.67	Joback Method
cpg	478.55	J/mol×K	765.34	Joback Method
cpg	466.17	J/mol×K	729.00	Joback Method
cpg	452.85	J/mol×K	692.66	Joback Method
dvisc	0.0015745	Pa×s	395.95	Joback Method
dvisc	0.0000362	Pa×s	692.66	Joback Method
dvisc	0.0000534	Pa×s	643.21	Joback Method
dvisc	0.0000838	Pa×s	593.76	Joback Method
dvisc	0.0001429	Pa×s	544.30	Joback Method
dvisc	0.0002710	Pa×s	494.85	Joback Method
dvisc	0.0005924	Pa×s	445.40	Joback Method
hvapt	71.90	kJ/mol	509.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C7501022&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
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
hvapt: Enthalpy of vaporization at a given temperature
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