Benzenemethanol, 2-(phenylmethyl)-

Other names: Benzyl alcohol, o-benzyl-
2-Benzylbenzyl alcohol
Inchi: InChI=1S/C14H14O/c15-11-14-9-5-4-8-13(14)10-12-6-2-1-3-7-12/h1-9,15H,10-11H2
InchiKey: GTKWHQWJTVWORA-UHFFFAOYSA-N
Formula: C14H14O
SMILES: OCc1ccccc1Cc1ccccc1
Mol. weight [g/mol]: 198.26
CAS: 1586-00-1

Physical Properties

Property code	Value	Unit	Source
gf	145.37	kJ/mol	Joback Method
hf	-22.93	kJ/mol	Joback Method
hfus	23.80	kJ/mol	Joback Method
hvap	68.65	kJ/mol	Joback Method
log10ws	-3.71		Crippen Method
logp	2.770		Crippen Method
mcvol	166.470	ml/mol	McGowan Method
pc	3009.03	kPa	Joback Method
tb	670.24	K	Joback Method
tc	890.87	K	Joback Method
tf	373.72	K	Joback Method
vc	0.623	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	427.64	J/mol×K	670.24	Joback Method
cpg	441.29	J/mol×K	707.01	Joback Method
cpg	453.97	J/mol×K	743.78	Joback Method
cpg	465.74	J/mol×K	780.56	Joback Method
cpg	476.65	J/mol×K	817.33	Joback Method
cpg	486.77	J/mol×K	854.10	Joback Method
cpg	496.15	J/mol×K	890.87	Joback Method

dvisc	0.0026100	Pa×s	373.72	Joback Method
dvisc	0.0009122	Pa×s	423.14	Joback Method
dvisc	0.0003972	Pa×s	472.56	Joback Method
dvisc	0.0002025	Pa×s	521.98	Joback Method
dvisc	0.0001159	Pa×s	571.40	Joback Method
dvisc	0.0000726	Pa×s	620.82	Joback Method
dvisc	0.0000487	Pa×s	670.24	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1586001&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