

Benzenemethanol, 4-methyl-«alpha»-phenyl-

Other names:	4-Methylbenzhydrol p-Methylbenzhydrol Benzhydrol, 4-methyl- Phenyl-p-tolyl-methanol «alpha»-p-tolylbenzyl alcohol
Inchi:	InChI=1S/C14H14O/c1-11-7-9-13(10-8-11)14(15)12-5-3-2-4-6-12/h2-10,14-15H,1H3
InchiKey:	IHASOVONMUHDND-UHFFFAOYSA-N
Formula:	C14H14O
SMILES:	<chem>Cc1ccc(C(O)c2ccccc2)cc1</chem>
Mol. weight [g/mol]:	198.26
CAS:	1517-63-1

Physical Properties

Property code	Value	Unit	Source
gf	142.93	kJ/mol	Joback Method
hf	-28.21	kJ/mol	Joback Method
hfus	20.27	kJ/mol	Joback Method
hvap	68.26	kJ/mol	Joback Method
log10ws	-3.77		Crippen Method
logp	3.077		Crippen Method
mcvol	166.470	ml/mol	McGowan Method
pc	3035.62	kPa	Joback Method
tb	669.80	K	Joback Method
tc	894.76	K	Joback Method
tf	358.72	K	Joback Method
vc	0.617	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	428.17	J/mol×K	669.80	Joback Method
cpg	442.12	J/mol×K	707.29	Joback Method
cpg	455.05	J/mol×K	744.79	Joback Method
cpg	467.02	J/mol×K	782.28	Joback Method

cpg	478.09	J/molxK	819.77	Joback Method
cpg	488.33	J/molxK	857.27	Joback Method
cpg	497.79	J/molxK	894.76	Joback Method
dvisc	0.0036957	Paxs	358.72	Joback Method
dvisc	0.0011159	Paxs	410.57	Joback Method
dvisc	0.0004407	Paxs	462.41	Joback Method
dvisc	0.0002099	Paxs	514.26	Joback Method
dvisc	0.0001145	Paxs	566.11	Joback Method
dvisc	0.0000692	Paxs	617.95	Joback Method
dvisc	0.0000452	Paxs	669.80	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1517631&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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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