PHENYL-P-TOLYL-METHANOL

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:	Cc1ccc(C(O)c2ccccc2)cc1
Mol. weight [g/mol]:	198.27

Physical Properties

Property code	Value	Unit	Source
af	0.6267		Cheméo Relay (1.0)
gf	142.93	kJ/mol	Joback Method
hf	-43.77	kJ/mol	Cheméo Relay (1.0)
hfus	20.27	kJ/mol	Joback Method
hvap	89.52	kJ/mol	Cheméo Relay (1.0)
ie	8.61	eV	Cheméo Relay (1.0)
log10ws	-2.64		Cheméo Relay (1.0)
logp	3.077		Crippen Method
mcvol	166.470	ml/mol	McGowan Method
pc	3035.62	kPa	Joback Method
tb	539.77	K	Cheméo Relay (1.0)
tc	844.96	K	Cheméo Relay (1.0)
tf	323.15	K	Cheméo Relay (1.0)
vc	0.613	m3/kmol	Cheméo Relay (1.0)

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/mol×K	819.77	Joback Method
cpg	488.33	J/mol×K	857.27	Joback Method
cpg	497.79	J/mol×K	894.76	Joback Method
dvisc	0.0036957	Pa×s	358.72	Joback Method
dvisc	0.0011159	Pa×s	410.57	Joback Method
dvisc	0.0004407	Pa×s	462.41	Joback Method
dvisc	0.0002099	Pa×s	514.26	Joback Method
dvisc	0.0001145	Pa×s	566.11	Joback Method
dvisc	0.0000692	Pa×s	617.95	Joback Method
dvisc	0.0000452	Pa×s	669.80	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1517631&Units=SI

Legend

af:	Acentric Factor
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
ie:	Ionization energy
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