

Benzenemethanol, «alpha»,4-dimethyl-

Other names:	Benzyl alcohol, p, «alpha»-dimethyl- p-Tolylmethylcarbinol p, «alpha»-Dimethylbenzyl alcohol Bilagen Galindex Methyl-p-tolylcarbinol Norbilan Tomobil 1-(p-Methylphenyl)ethanol 1-(4-Methylphenyl)ethanol 1-(4-Tolyl)ethanol 1-p-Tolyl-1-ethanol 1-p-Tolylethanol 4-(«alpha»-Hydroxyethyl)toluene 4-Methyl-«alpha»-phenethyl alcohol «alpha»,4-Dimethylbenzyl alcohol «alpha»,4-Dimethylbenzenemethanol Ethanol, 1-(p-tolyl)- 4-Methylphenylmethylcarbinol Ethanol, 1-(4-methylphenyl) (./-.)-p, «alpha»-Dimethylbenzyl alcohol Methyl p-methylphenyl carbinol NSC 41714
Inchi:	InChI=1S/C9H12O/c1-7-3-5-9(6-4-7)8(2)10/h3-6,8,10H,1-2H3
InchiKey:	JESIHYIJKKUWIS-UHFFFAOYSA-N
Formula:	C9H12O
SMILES:	<chem>Cc1ccc(C(C)O)cc1</chem>
Mol. weight [g/mol]:	136.19
CAS:	5788-09-0

Physical Properties

Property code	Value	Unit	Source
gf	-11.58	kJ/mol	Joback Method
hf	-161.54	kJ/mol	Joback Method
hfus	13.28	kJ/mol	Joback Method
hvap	54.86	kJ/mol	Joback Method

log10ws	-2.47		Crippen Method
logp	2.048		Crippen Method
mcvol	119.780	ml/mol	McGowan Method
pc	3602.88	kPa	Joback Method
tb	528.72	K	Joback Method
tc	728.91	K	Joback Method
tf	275.95	K	Joback Method
vc	0.445	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	266.77	J/molxK	528.72	Joback Method
cpg	278.42	J/molxK	562.08	Joback Method
cpg	289.43	J/molxK	595.45	Joback Method
cpg	299.83	J/molxK	628.81	Joback Method
cpg	309.65	J/molxK	662.18	Joback Method
cpg	318.90	J/molxK	695.54	Joback Method
cpg	327.61	J/molxK	728.91	Joback Method
dvisc	0.0169073	Paxs	275.95	Joback Method
dvisc	0.0042083	Paxs	318.08	Joback Method
dvisc	0.0014502	Paxs	360.21	Joback Method
dvisc	0.0006246	Paxs	402.34	Joback Method
dvisc	0.0003156	Paxs	444.46	Joback Method
dvisc	0.0001795	Paxs	486.59	Joback Method
dvisc	0.0001117	Paxs	528.72	Joback Method

Sources

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>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C5788090&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

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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