Benzeneethanol, «alpha»,«alpha»-dimethyl-

Other names:	Phenethyl alcohol, «alpha»,«alpha»-dimethyl- «alpha»,«alpha»-Dimethylphenethanol «alpha»,«alpha»-Dimethylphenethyl alcohol Benzyldimethylcarbinol Dimethylbenzylcarbinol DMBC 1,1-Dimethyl-2-Phenylethanol 1,1-Dimethylphenylethanol 2-Methyl-1-phenyl-2-propanol Phenyl-tert-butanol «alpha»,«alpha»-Dimethyl-«beta»-phenylethyl alcohol «beta»-Phenyl-tert-butyl alcohol 2-Benzyl-2-propanol 2-Hydroxy-2-methyl-1-phenylpropane 2-Methyl-3-phenyl-2-propanol 1,1-Dimethyl-2-phenylethyl alcohol 2-Methyl-1-phenylpropan-2-ol Ethanol, 1,1-dimethyl-2-phenyl- «alpha»,«alpha»-Dimethylphenylethyl alcohol NSC 27228
Inchi:	InChI=1S/C10H14O/c1-10(2,11)8-9-6-4-3-5-7-9/h3-7,11H,8H2,1-2H3
InchiKey:	RIWRBSMFKVOJMN-UHFFFAOYSA-N
Formula:	C10H14O
SMILES:	CC(C)(O)Cc1ccccc1
Mol. weight [g/mol]:	150.22
CAS:	100-86-7

Physical Properties

Property code	Value	Unit	Source
gf	11.75	kJ/mol	Joback Method
hf	-174.18	kJ/mol	Joback Method
hfus	12.37	kJ/mol	Joback Method
hvap	55.51	kJ/mol	Joback Method
log10ws	-2.49		Crippen Method
logp	2.000		Crippen Method
mcvol	133.870	ml/mol	McGowan Method
pc	3318.18	kPa	Joback Method

rinpol	1124.60		NIST Webbook
ripol	1781.00		NIST Webbook
tb	543.83	K	Joback Method
tc	747.81	K	Joback Method
tf	292.12	K	Joback Method
vc	0.495	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.14	J/mol×K	543.83	Joback Method
cpg	328.48	J/mol×K	577.83	Joback Method
cpg	340.94	J/mol×K	611.82	Joback Method
cpg	352.57	J/mol×K	645.82	Joback Method
cpg	363.42	J/mol×K	679.82	Joback Method
cpg	373.54	J/mol×K	713.82	Joback Method
cpg	382.98	J/mol×K	747.81	Joback Method
dvisc	0.0171729	Pa×s	292.12	Joback Method
dvisc	0.0042551	Pa×s	334.07	Joback Method
dvisc	0.0014394	Pa×s	376.02	Joback Method
dvisc	0.0006053	Pa×s	417.97	Joback Method
dvisc	0.0002981	Pa×s	459.93	Joback Method
dvisc	0.0001653	Pa×s	501.88	Joback Method
dvisc	0.0001003	Pa×s	543.83	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C100867&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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume