Benzenemethanol, «alpha»-methyl-«alpha»-propyl-

Other names: 2-Phenyl-2-pentanol
Inchi: InChI=1S/C11H16O/c1-3-9-11(2,12)10-7-5-4-6-8-10/h4-8,12H,3,9H2,1-2H3
InchiKey: YBQOTTAEVBHNEJ-UHFFFAOYSA-N
Formula: C11H16O
SMILES: CCCC(C)(O)c1ccccc1
Mol. weight [g/mol]: 164.24
CAS: 4383-18-0

Physical Properties

Property code	Value	Unit	Source
gf	20.17	kJ/mol	Joback Method
hf	-194.82	kJ/mol	Joback Method
hfus	14.96	kJ/mol	Joback Method
hvap	57.74	kJ/mol	Joback Method
log10ws	-2.96		Crippen Method
logp	2.694		Crippen Method
mcvol	147.960	ml/mol	McGowan Method
pc	2979.54	kPa	Joback Method
tb	566.71	K	Joback Method
tc	767.71	K	Joback Method
tf	303.39	K	Joback Method
vc	0.551	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	361.84	J/mol×K	566.71	Joback Method
cpg	375.86	J/mol×K	600.21	Joback Method
cpg	388.99	J/mol×K	633.71	Joback Method
cpg	401.27	J/mol×K	667.21	Joback Method
cpg	412.76	J/mol×K	700.71	Joback Method
cpg	423.51	J/mol×K	734.21	Joback Method
cpg	433.56	J/mol×K	767.71	Joback Method
dvisc	0.0138910	Pa×s	303.39	Joback Method

dvisc	0.0034560	Pa×s	347.28	Joback Method
dvisc	0.0011748	Pa×s	391.16	Joback Method
dvisc	0.0004965	Pa×s	435.05	Joback Method
dvisc	0.0002457	Pa×s	478.94	Joback Method
dvisc	0.0001368	Pa×s	522.82	Joback Method
dvisc	0.0000834	Pa×s	566.71	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4383180&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

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