Benzenemethanol, «alpha»-propyl-

Other names:	alpha-n-Propyl benzyl alcohol
	«alpha»-Propylbenzyl alcohol
	1-Butanol, 1-phenyl
	1-Phenylbutan-1-ol
Inchi:	InChI=1S/C10H14O/c1-2-6-10(11)9-7-4-3-5-8-9/h3-5,7-8,10-11H,2,6H2,1H3
InchiKey:	HQRWWHIETAKIMO-UHFFFAOYSA-N
Formula:	C10H14O
SMILES:	CCCC(O)c1ccccc1
Mol. weight [g/mol]:	150.22
CAS:	614-14-2

Physical Properties

Property code	Value	Unit	Source
gf	6.47	kJ/mol	Joback Method
hf	-170.71	kJ/mol	Joback Method
hfus	16.26	kJ/mol	Joback Method
hvap	56.42	kJ/mol	Joback Method
log10ws	-2.83		Crippen Method
logp	2.520		Crippen Method
mcvol	133.870	ml/mol	McGowan Method
pc	3276.53	kPa	Joback Method
rinpol	1310.00		NIST Webbook
rinpol	1310.00		NIST Webbook
rinpol	1220.30		NIST Webbook
ripol	1955.00		NIST Webbook
ripol	1955.00		NIST Webbook
tb	506.15 ± 2.00	K	NIST Webbook
tc	743.00	K	Joback Method
tf	274.70	K	Joback Method
vc	0.500	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	312.06	J/mol×K	546.62	Joback Method
cpg	324.88	J/mol×K	579.35	Joback Method
cpg	336.98	J/mol×K	612.08	Joback Method
cpg	348.39	J/mol×K	644.81	Joback Method
cpg	359.13	J/mol×K	677.54	Joback Method
cpg	369.24	J/mol×K	710.27	Joback Method
cpg	378.75	J/mol×K	743.00	Joback Method
dvisc	0.0247773	Pa×s	274.70	Joback Method
dvisc	0.0051616	Pa×s	320.02	Joback Method
dvisc	0.0015868	Pa×s	365.34	Joback Method
dvisc	0.0006329	Pa×s	410.66	Joback Method
dvisc	0.0003030	Pa×s	455.98	Joback Method
dvisc	0.0001658	Pa×s	501.30	Joback Method
dvisc	0.0001002	Pa×s	546.62	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C614142&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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