Benzeneethanol, «alpha»-propyl-

Other names: DL-1-phenylpentan-2-ol
1-Phenylpentan-2-ol
Inchi: InChI=1S/C11H16O/c1-2-6-11(12)9-10-7-4-3-5-8-10/h3-5,7-8,11-12H,2,6,9H2,1H3
InchiKey: FCURFTSXOIATDW-UHFFFAOYSA-N
Formula: C11H16O
SMILES: CCCC(O)Cc1ccccc1
Mol. weight [g/mol]: 164.24
CAS: 705-73-7

Physical Properties

Property code	Value	Unit	Source
gf	14.89	kJ/mol	Joback Method
hf	-191.35	kJ/mol	Joback Method
hfus	18.85	kJ/mol	Joback Method
hvap	58.65	kJ/mol	Joback Method
log10ws	-2.91		Crippen Method
logp	2.390		Crippen Method
mcvol	147.960	ml/mol	McGowan Method
pc	2944.08	kPa	Joback Method
ripol	2256.00		NIST Webbook
ripol	2256.00		NIST Webbook
tb	569.50	K	Joback Method
tc	763.30	K	Joback Method
tf	285.97	K	Joback Method
vc	0.556	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	358.85	J/mol×K	569.50	Joback Method
cpg	372.41	J/mol×K	601.80	Joback Method
cpg	385.22	J/mol×K	634.10	Joback Method
cpg	397.31	J/mol×K	666.40	Joback Method
cpg	408.71	J/mol×K	698.70	Joback Method

cpg	419.45	J/mol×K	731.00	Joback Method
cpg	429.57	J/mol×K	763.30	Joback Method
dvisc	0.0199438	Pa×s	285.97	Joback Method
dvisc	0.0042092	Pa×s	333.23	Joback Method
dvisc	0.0013074	Pa×s	380.48	Joback Method
dvisc	0.0005258	Pa×s	427.74	Joback Method
dvisc	0.0002535	Pa×s	474.99	Joback Method
dvisc	0.0001394	Pa×s	522.25	Joback Method
dvisc	0.0000847	Pa×s	569.50	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=C705737&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume