p-Chloro-«alpha»-propylbenzylalcohol

Other names: 4-chloro-«alpha»-propylbenzyl alcohol
Inchi: InChI=1S/C10H13ClO/c1-2-3-10(12)8-4-6-9(11)7-5-8/h4-7,10,12H,2-3H2,1H3
InchiKey: HAELFEDVTLKJMU-UHFFFAOYSA-N
Formula: C10H13ClO
SMILES: CCCC(O)c1ccc(Cl)cc1
Mol. weight [g/mol]: 184.66
CAS: 13856-86-5

Physical Properties

Property code	Value	Unit	Source
gf	-15.09	kJ/mol	Joback Method
hf	-197.92	kJ/mol	Joback Method
hfus	20.07	kJ/mol	Joback Method
hvap	61.47	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.173		Crippen Method
mcvol	146.110	ml/mol	McGowan Method
pc	3089.85	kPa	Joback Method
rinpol	1416.50		NIST Webbook
tb	589.03	K	Joback Method
tc	790.78	K	Joback Method
tf	317.14	K	Joback Method
vc	0.549	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	337.61	J/mol×K	589.03	Joback Method
cpg	389.81	J/mol×K	757.15	Joback Method
cpg	380.62	J/mol×K	723.53	Joback Method
cpg	370.83	J/mol×K	689.90	Joback Method
cpg	360.42	J/mol×K	656.28	Joback Method
cpg	349.36	J/mol×K	622.65	Joback Method
cpg	398.44	J/mol×K	790.78	Joback Method

dvisc	0.0000828	Pa×s	589.03	Joback Method
dvisc	0.0001296	Pa×s	543.71	Joback Method
dvisc	0.0002199	Pa×s	498.40	Joback Method
dvisc	0.0004149	Pa×s	453.08	Joback Method
dvisc	0.0009012	Pa×s	407.77	Joback Method
dvisc	0.0023767	Pa×s	362.45	Joback Method
dvisc	0.0082697	Pa×s	317.14	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13856865&Units=SI

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