4-Benzyl-4-hydroxypiperidine

Other names: 4-Piperidinol, 4-(phenylmethyl)-
4-Piperidinol, 4-benzyl-
Piperidin-4-ol, 4-phenylmethyl-
Piperidin-4-ol, 4-benzyl-
4-benzylpiperidin-4-ol
Inchi: InChI=1S/C12H17NO/c14-12(6-8-13-9-7-12)10-11-4-2-1-3-5-11/h1-5,13-14H,6-10H2
InchiKey: KJZBZOFESQSBCV-UHFFFAOYSA-N
Formula: C12H17NO
SMILES: OC1(Cc2ccccc2)CCNCC1
Mol. weight [g/mol]: 191.27
CAS: 51135-96-7

Physical Properties

Property code	Value	Unit	Source
gf	132.42	kJ/mol	Joback Method
hf	-99.34	kJ/mol	Joback Method
hfus	20.09	kJ/mol	Joback Method
hvap	67.30	kJ/mol	Joback Method
log10ws	-2.41		Crippen Method
logp	1.344		Crippen Method
mcvol	161.170	ml/mol	McGowan Method
pc	3577.07	kPa	Joback Method
tb	661.16	K	Joback Method
tc	893.37	K	Joback Method
tf	448.55	K	Joback Method
vc	0.587	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	440.11	J/mol×K	661.16	Joback Method
cpg	456.39	J/mol×K	699.86	Joback Method
cpg	471.72	J/mol×K	738.56	Joback Method
cpg	486.26	J/mol×K	777.26	Joback Method

cpg	500.15	J/mol×K	815.96	Joback Method
cpg	513.56	J/mol×K	854.67	Joback Method
cpg	526.63	J/mol×K	893.37	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=C51135967&Units=SI

Legend

cpg:	Ideal gas heat capacity
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