2-Piperidinemethanol

Other names: 2-(hydroxymethyl)piperidine
piperidin-2-ylmethanol
Inchi: InChI=1S/C6H13NO/c8-5-6-3-1-2-4-7-6/h6-8H,1-5H2
InchiKey: PRAYXGYYVXRDDW-UHFFFAOYSA-N
Formula: C6H13NO
SMILES: OCC1CCCCN1
Mol. weight [g/mol]: 115.17
CAS: 3433-37-2

Physical Properties

Property code	Value	Unit	Source
gf	-25.02	kJ/mol	Joback Method
hf	-227.27	kJ/mol	Joback Method
hfus	16.81	kJ/mol	Joback Method
hvap	52.82	kJ/mol	Joback Method
log10ws	-0.79		Crippen Method
logp	0.121		Crippen Method
mcvol	100.390	ml/mol	McGowan Method
pc	4615.13	kPa	Joback Method
tb	496.96	K	Joback Method
tc	698.33	K	Joback Method
tf	330.61	K	Joback Method
vc	0.360	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	228.57	J/mol×K	496.96	Joback Method
cpg	241.67	J/mol×K	530.52	Joback Method
cpg	254.14	J/mol×K	564.08	Joback Method
cpg	266.00	J/mol×K	597.65	Joback Method
cpg	277.24	J/mol×K	631.21	Joback Method
cpg	287.89	J/mol×K	664.77	Joback Method
cpg	297.96	J/mol×K	698.33	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3433372&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
A comparative study of the volumetric properties of aqueous solutions of pyridine and piperidine derivatives:	https://www.doi.org/10.1016/j.fluid.2012.10.024
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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