

4-Hydroxypiperidine

Other names:	4-Piperidinol 4-piperidinol (4-hydroxypiperidine) piperidin-4-ol
Inchi:	InChI=1S/C5H11NO/c7-5-1-3-6-4-2-5/h5-7H,1-4H2
InchiKey:	HDOWRFHMPULYOA-UHFFFAOYSA-N
Formula:	C5H11NO
SMILES:	OC1CCNCC1
Mol. weight [g/mol]:	101.15
CAS:	5382-16-1

Physical Properties

Property code	Value	Unit	Source
gf	-33.44	kJ/mol	Joback Method
hf	-206.63	kJ/mol	Joback Method
hfus	14.22	kJ/mol	Joback Method
hvap	50.59	kJ/mol	Joback Method
log10ws	-0.37		Crippen Method
logp	-0.269		Crippen Method
mcvol	86.300	ml/mol	McGowan Method
pc	5281.57	kPa	Joback Method
tb	474.08	K	Joback Method
tc	678.21	K	Joback Method
tf	319.34	K	Joback Method
vc	0.304	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	186.10	J/mol×K	474.08	Joback Method
cpg	198.11	J/mol×K	508.10	Joback Method
cpg	209.55	J/mol×K	542.12	Joback Method
cpg	220.43	J/mol×K	576.14	Joback Method
cpg	230.75	J/mol×K	610.16	Joback Method
cpg	240.54	J/mol×K	644.19	Joback Method

cpg

249.78

J/mol×K

678.21

Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	384.20	K	1.30	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C5382161&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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