

2-(2-Hydroxyethyl)piperidine

Other names:	2-piperidin-2-ylethanol 2-piperidineethanol
Inchi:	InChI=1S/C7H15NO/c9-6-4-7-3-1-2-5-8-7/h7-9H,1-6H2
InchiKey:	PTHDBHDZSMGHKF-UHFFFAOYSA-N
Formula:	C7H15NO
SMILES:	OCCC1CCCCN1
Mol. weight [g/mol]:	129.20
CAS:	1484-84-0

Physical Properties

Property code	Value	Unit	Source
gf	-16.60	kJ/mol	Joback Method
hf	-247.91	kJ/mol	Joback Method
hfus	19.40	kJ/mol	Joback Method
hvap	75.20 ± 0.50	kJ/mol	NIST Webbook
log10ws	-1.21		Crippen Method
logp	0.511		Crippen Method
mcvol	114.480	ml/mol	McGowan Method
pc	4067.32	kPa	Joback Method
tb	507.70	K	NIST Webbook
tc	718.47	K	Joback Method
tf	341.88	K	Joback Method
vc	0.416	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	273.01	J/mol×K	519.84	Joback Method
cpg	287.07	J/mol×K	552.95	Joback Method
cpg	300.45	J/mol×K	586.05	Joback Method
cpg	313.15	J/mol×K	619.16	Joback Method
cpg	325.21	J/mol×K	652.26	Joback Method
cpg	336.62	J/mol×K	685.37	Joback Method
cpg	347.40	J/mol×K	718.47	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Mutual Diffusion Coefficients of Some Aqueous Alkanolamines Solutions: Density and Viscosity of Aqueous Solutions of 2-Piperidineethanol, Density and Viscosity of Aqueous Mixtures of 1,2-Piperidinediethanol + 2-Piperidineethanol (298 to 323) K, and Surface Tension of Aqueous Solutions of (N-Methyl)diethanolamine + Piperazine)	https://www.doi.org/10.1021/je049828h https://www.doi.org/10.1021/je060108f https://www.doi.org/10.1021/je0603271 https://en.wikipedia.org/wiki/Joback_method http://link.springer.com/article/10.1007/BF02311772 http://webbook.nist.gov/cgi/cbook.cgi?ID=C1484840&Units=SI
NIST Webbook: (2-Amino-2-methyl-1-propanol + Piperazine), and (2-Piperidineethanol + Piperazine) from (293 to 323) K:	

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

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