1-Piperazineethanol

Other names:	(2-Hydroxyethyl)piperazine
	1-(2-Hydroxyethyl)piperazine
	1-(«beta»-Hydroxyethyl)piperazine
	1-Hydroxy-2-(piperazin-1-yl)ethane
	1-Piperazinethanol
	2-(1-Piperazinyl)ethanol
	2-Piperazinoethanol
	2-piperazin-1-ylethanol
	4-(2-Hydroxyethyl)piperazine
	Ethanol, 2-(1-piperazinyl)-
	Hydroxyethylpiperazine
	N-(2-hydroxyethyl)piperazine
	N-(Hydroxyethyl)piperazine
	N-(«beta»-Hydroxyethyl)piperazine
	NSC 26884
	USAF DO-22
	piperazine, N-(2-hydroxyethyl)-
Inchi:	InChI=1S/C6H14N2O/c9-6-5-8-3-1-7-2-4-8/h7,9H,1-6H2
InchiKey:	WFCSWCVEJLETKA-UHFFFAOYSA-N
Formula:	C6H14N2O
SMILES:	OCCN1CCNCC1
Mol. weight [g/mol]:	130.19
CAS:	103-76-4

Physical Properties

Property code	Value	Unit	Source
chl	-4134.30 ± 1.10	kJ/mol	NIST Webbook
hfl	-227.60 ± 1.10	kJ/mol	NIST Webbook
hvap	78.80 ± 0.70	kJ/mol	NIST Webbook
log10ws	0.75		Crippen Method
logp	-1.116		Crippen Method
mcvol	110.370	ml/mol	McGowan Method
tb	519.20	K	NIST Webbook
tb	519.55	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	319.00	J/mol×K	353.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	285.00	J/mol×K	298.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	289.90	J/mol×K	303.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	292.90	J/mol×K	308.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	296.00	J/mol×K	313.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	298.90	J/mol×K	318.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	301.70	J/mol×K	323.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	305.00	J/mol×K	328.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	308.10	J/mol×K	333.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K

cpl	311.00	J/mol×K	338.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	313.90	J/mol×K	343.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
cpl	316.50	J/mol×K	348.15	Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K
hvapt	77.30 ± 0.70	kJ/mol	325.50	NIST Webbook

Sources

Molar Heat Capacity (Cp) of Aqueous Cyclic Amine Solutions from (298.15 to 353.15) K:	https://www.doi.org/10.1021/je400178k
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C103764&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Molar excess enthalpy (Hm E) for systems of aqueous piperazine derivatives:	https://www.doi.org/10.1016/j.jct.2015.06.006

Legend

chl:	Standard liquid enthalpy of combustion
cpl:	Liquid phase heat capacity
hfl:	Liquid phase enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
tb:	Normal Boiling Point Temperature