Cyclohexanemethylamine

Other names:	(Aminomethyl)cyclohexane
	Cyclohexylmethanamine
	Cyclohexylmethylamine
	c-C6H11CH2NH2
Inchi:	InChI=1S/C7H15N/c8-6-7-4-2-1-3-5-7/h7H,1-6,8H2
InchiKey:	AVKNGPAMCBSNSO-UHFFFAOYSA-N
Formula:	C7H15N
SMILES:	NCC1CCCCC1
Mol. weight [g/mol]:	113.20
CAS:	3218-02-8

Physical Properties

Property code	Value	Unit	Source
affp	926.60	kJ/mol	NIST Webbook
basg	895.80	kJ/mol	NIST Webbook
gf	98.96	kJ/mol	Joback Method
hf	-99.70	kJ/mol	Joback Method
hfus	10.92	kJ/mol	Joback Method
hvap	42.25	kJ/mol	Joback Method
log10ws	-1.84		Crippen Method
logp	1.525		Crippen Method
mcvol	108.610	ml/mol	McGowan Method
pc	3773.04	kPa	Joback Method
tb	436.00	K	NIST Webbook
tb	419.20	K	NIST Webbook
tc	669.49	K	Joback Method
tf	259.29	K	Joback Method
vc	0.390	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	232.91	J/mol×K	451.64	Joback Method
cpg	249.68	J/mol×K	487.95	Joback Method

cpg	265.54	J/mol×K	524.26	Joback Method
cpg	280.52	J/mol×K	560.57	Joback Method
cpg	294.63	J/mol×K	596.87	Joback Method
cpg	307.92	J/mol×K	633.18	Joback Method
cpg	320.40	J/mol×K	669.49	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3218028&Units=SI
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

Legend

affp:	Proton affinity
basg:	Gas basicity
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