CH2NH2

Inchi: InChI=1S/CH4N/c1-2/h1-2H2
InchiKey: XXJGBENTLXFVFI-UHFFFAOYSA-N
Formula: CH4N
SMILES: [CH2]N
Mol. weight [g/mol]: 30.05
CAS: 10507-29-6

Physical Properties

Property code	Value	Unit	Source
affp	832.80	kJ/mol	NIST Webbook
basg	801.60	kJ/mol	NIST Webbook
gf	76.37	kJ/mol	Joback Method
hf	25.63	kJ/mol	Joback Method
hfpi	745.00	kJ/mol	NIST Webbook
hfus	5.23	kJ/mol	Joback Method
hvap	28.31	kJ/mol	Joback Method
ie	6.97 ± 0.03	eV	NIST Webbook
ie	6.20	eV	NIST Webbook
ie	6.10	eV	NIST Webbook
ie	6.29 ± 0.03	eV	NIST Webbook
log10ws	0.22		Crippen Method
logp	-0.263		Crippen Method
mcvol	32.780	ml/mol	McGowan Method
pc	6796.39	kPa	Joback Method
tb	294.11	K	Joback Method
tc	471.46	K	Joback Method
tf	200.66	K	Joback Method
vc	0.112	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	44.37	J/mol×K	294.11	Joback Method
cpg	48.04	J/mol×K	323.67	Joback Method

cpg	51.43	J/mol×K	353.23	Joback Method
cpg	54.56	J/mol×K	382.79	Joback Method
cpg	57.43	J/mol×K	412.35	Joback Method
cpg	60.07	J/mol×K	441.91	Joback Method
cpg	62.49	J/mol×K	471.46	Joback Method

Sources

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=C10507296&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
hfpi:	Enthalpy of formation of positive ion at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
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