

NH2+

Inchi:	InChI=1S/H2N/h1H2/q+1
InchiKey:	QTLMMXDMXKCANI-UHFFFAOYSA-N
Formula:	H2N+
SMILES:	[NH2+]
Mol. weight [g/mol]:	16.02
CAS:	15194-15-7

Physical Properties

Property code	Value	Unit	Source
gf	67.95	kJ/mol	Joback Method
hf	46.27	kJ/mol	Joback Method
hfus	2.64	kJ/mol	Joback Method
hvap	26.09	kJ/mol	Joback Method
log10ws	2.42		Crippen Method
logp	-1.522		Crippen Method
mvol	18.690	ml/mol	McGowan Method
pc	8014.82	kPa	Joback Method
tb	271.23	K	Joback Method
tc	446.94	K	Joback Method
tf	189.39	K	Joback Method
vc	0.056	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	20.22	J/molxK	271.23	Joback Method
cpg	22.14	J/molxK	300.52	Joback Method
cpg	23.84	J/molxK	329.80	Joback Method
cpg	25.33	J/molxK	359.09	Joback Method
cpg	26.64	J/molxK	388.37	Joback Method
cpg	27.77	J/molxK	417.66	Joback Method
cpg	28.75	J/molxK	446.94	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C15194157&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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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