Amino radical

Inchi: InChI=1S/H2N/h1H2
InchiKey: MDFFNEOEWAXZRQ-UHFFFAOYSA-N
Formula: H2N
SMILES: [NH2]
Mol. weight [g/mol]: 16.02
CAS: 13770-40-6

Physical Properties

Property code	Value	Unit	Source
affp	773.40	kJ/mol	NIST Webbook
basg	742.00	kJ/mol	NIST Webbook
ea	1.12	eV	NIST Webbook
ea	0.72	eV	NIST Webbook
ea	0.76 ± 0.04	eV	NIST Webbook
ea	0.74 ± 0.02	eV	NIST Webbook
ea	0.78 ± 0.04	eV	NIST Webbook
ea	0.77 ± 0.04	eV	NIST Webbook
ea	0.77 ± 0.01	eV	NIST Webbook
ea	0.74 ± 0.03	eV	NIST Webbook
gf	67.95	kJ/mol	Joback Method
hf	46.27	kJ/mol	Joback Method
hfpi	1264.00 ± 6.30	kJ/mol	NIST Webbook
hfpiz	1266.00 ± 6.30	kJ/mol	NIST Webbook
hfus	2.64	kJ/mol	Joback Method
hvap	26.09	kJ/mol	Joback Method
ie	11.70	eV	NIST Webbook
ie	11.22	eV	NIST Webbook
ie	11.40 ± 0.10	eV	NIST Webbook
ie	11.46 ± 0.01	eV	NIST Webbook
ie	11.14 ± 0.01	eV	NIST Webbook
ie	10.78 ± 0.05	eV	NIST Webbook
ie	12.00	eV	NIST Webbook
ie	12.00 ± 0.01	eV	NIST Webbook
log10ws	6.75		Crippen Method
logp	-0.052		Crippen Method
mcvol	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/mol×K	271.23	Joback Method
cpg	22.14	J/mol×K	300.52	Joback Method
cpg	23.84	J/mol×K	329.80	Joback Method
cpg	25.33	J/mol×K	359.09	Joback Method
cpg	26.64	J/mol×K	388.37	Joback Method
cpg	27.77	J/mol×K	417.66	Joback Method
cpg	28.75	J/mol×K	446.94	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=C13770406&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
ea: Electron affinity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfpi: Enthalpy of formation of positive ion at standard conditions
hfpiz: Enthalpy of formation of positive ion at 0K
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