Methanamine, N-hydroxy-N-methyl-

Other names: N,N-Dimethylhydroxylamine
Inchi: InChI=1S/C2H7NO/c1-3(2)4/h4H,1-2H3
InchiKey: VMESOKCXSYNAKD-UHFFFAOYSA-N
Formula: C2H7NO
SMILES: CN(C)O
Mol. weight [g/mol]: 61.08
CAS: 5725-96-2

Physical Properties

Property code	Value	Unit	Source
gf	-60.08	kJ/mol	Joback Method
hf	-169.31	kJ/mol	Joback Method
hfus	8.04	kJ/mol	Joback Method
hvap	38.77	kJ/mol	Joback Method
log10ws	1.12		Crippen Method
logp	-0.063		Crippen Method
mcvol	54.890	ml/mol	McGowan Method
pc	5739.21	kPa	Joback Method
tb	349.78	K	Joback Method
tc	510.76	K	Joback Method
tf	205.59	K	Joback Method
vc	0.184	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	93.37	J/mol×K	349.78	Joback Method
cpg	98.99	J/mol×K	376.61	Joback Method
cpg	104.39	J/mol×K	403.44	Joback Method
cpg	109.57	J/mol×K	430.27	Joback Method
cpg	114.52	J/mol×K	457.10	Joback Method
cpg	119.27	J/mol×K	483.93	Joback Method
cpg	123.81	J/mol×K	510.76	Joback Method
hvapt	45.70	kJ/mol	326.50	NIST Webbook

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5725962&Units=SI

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
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
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume