

Methane, nitroso-

Other names:	Nitrosomethane CH3NO
Inchi:	InChI=1S/CH3NO/c1-2-3/h1H3
InchiKey:	IMHRONYAKYWGCC-UHFFFAOYSA-N
Formula:	CH3NO
SMILES:	CN=O
Mol. weight [g/mol]:	45.04
CAS:	865-40-7

Physical Properties

Property code	Value	Unit	Source
hf	-232.16	kJ/mol	Joback Method
hvap	26.92	kJ/mol	Joback Method
ie	9.30	eV	NIST Webbook
ie	10.80 ± 0.30	eV	NIST Webbook
ie	9.68 ± 0.05	eV	NIST Webbook
ie	9.76 ± 0.05	eV	NIST Webbook
ie	9.80	eV	NIST Webbook
ie	8.70 ± 0.10	eV	NIST Webbook
ie	9.80	eV	NIST Webbook
ie	9.68 ± 0.05	eV	NIST Webbook
ie	9.30	eV	NIST Webbook
log10ws	-0.43		Crippen Method
logp	0.383		Crippen Method
mcvol	36.500	ml/mol	McGowan Method
pc	5636.27	kPa	Joback Method
tb	285.68	K	Joback Method
tc	451.23	K	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C865407&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

hf:	Enthalpy of formation 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

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