# 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 | 9.68 ± 0.05 | eV | NIST Webbook |
| ie | 9.80 | eV | NIST Webbook |
| ie | 9.80 | eV | NIST Webbook |
| ie | 9.76 ± 0.05 | eV | NIST Webbook |
| ie | 9.68 ± 0.05 | eV | NIST Webbook |
| ie | 9.30 | eV | NIST Webbook |
| ie | 8.70 ± 0.10 | eV | NIST Webbook |
| ie | 10.80 ± 0.30 | 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

**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=C865407&Units=SI

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# 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 |