# Methane, diazo-

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|---|---|
| **Other names:** | Azimethylene |
| | Diazomethane |
| | Acomethylene |
| | Diazirine |
| | Diazonium methylide |
| **Inchi:** | InChI=1S/CH2N2/c1-3-2/h1H2 |
| **InchiKey:** | YXHKONLOYHBTNS-UHFFFAOYSA-N |
| **Formula:** | CH2N2 |
| **SMILES:** | C=[N+]=[N-] |
| **Mol. weight [g/mol]:** | 42.04 |
| **CAS:** | 334-88-3 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| affp | 858.90 | kJ/mol | NIST Webbook |
| basg | 826.70 | kJ/mol | NIST Webbook |
| hf | 215.00 | kJ/mol | NIST Webbook |
| hf | 206.00 ± 9.60 | kJ/mol | NIST Webbook |
| ie | 9.00 ± 0.00 | eV | NIST Webbook |
| ie | 9.03 ± 0.05 | eV | NIST Webbook |
| ie | 9.00 | eV | NIST Webbook |
| ie | 9.00 ± 0.00 | eV | NIST Webbook |
| ie | 9.20 ± 0.30 | eV | NIST Webbook |
| log10ws | -1.88 | | Crippen Method |
| logp | -0.083 | | Crippen Method |
| mcvol | 36.310 | ml/mol | McGowan Method |

# Sources

| | |
|---|---|
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C334883&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

| | |
|---|---|
| **affp:** | Proton affinity |
| **basg:** | Gas basicity |
| **hf:** | Enthalpy of formation at standard conditions |
| **ie:** | Ionization energy |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |