# N,N-DIMETHYLFORMAMIDE DIETHYL ACETAL

**Other names:** 1,1-Diethoxy trimethyl amine
Methanamine, 1,1-diethoxy-N,N-dimethyl-
1,1-Diethoxy-N,N-dimethylmethanamine
**Inchi:** InChI=1S/C7H17NO2/c1-5-9-7(8(3)4)10-6-2/h7H,5-6H2,1-4H3
**InchiKey:** BWKAYBPLDRWMCJ-UHFFFAOYSA-N
**Formula:** C7H17NO2
**SMILES:** CCOC(OCC)N(C)C
**Mol. weight [g/mol]:** 147.22

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hf | -420.04 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 15.76 | kJ/mol | Joback Method |
| hvap | 51.02 | kJ/mol | Cheméo Relay (1.0) |
| ie | 8.30 | eV | Cheméo Relay (1.0) |
| log10ws | -0.28 | | Cheméo Relay (1.0) |
| logp | 0.905 | | Crippen Method |
| mcvol | 131.210 | ml/mol | McGowan Method |
| pc | 2718.33 | kPa | Joback Method |
| tb | 404.70 | K | NIST Webbook |
| tc | 569.76 | K | Cheméo Relay (1.0) |
| tf | 220.04 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 271.56 | J/mol×K | 416.40 | Joback Method |
| cpg | 284.27 | J/mol×K | 444.27 | Joback Method |
| cpg | 296.59 | J/mol×K | 472.13 | Joback Method |
| cpg | 308.52 | J/mol×K | 500.00 | Joback Method |
| cpg | 320.05 | J/mol×K | 527.86 | Joback Method |
| cpg | 331.20 | J/mol×K | 555.73 | Joback Method |
| cpg | 341.95 | J/mol×K | 583.60 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C1188336&Units=SI |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Cheméo Relay (1.0):** | |
| **Cheméo Relay (1.0, beta):** | |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **hf:** | Enthalpy of formation at standard conditions |
| **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 |