# 1-Naphthalenecarboxamide, N,N-dimethyl-

**Other names:** 1-Naphthamide, N,N-dimethyl-
**Inchi:** InChI=1S/C13H13NO/c1-14(2)13(15)12-9-5-7-10-6-3-4-8-11(10)12/h3-9H,1-2H3
**InchiKey:** QOTWSCXRKFJOAW-UHFFFAOYSA-N
**Formula:** C13H13NO
**SMILES:** CN(C)C(=O)c1cccc2ccccc12
**Mol. weight [g/mol]:** 199.25
**CAS:** 3815-24-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 249.87 | kJ/mol | Joback Method |
| hf | 59.43 | kJ/mol | Joback Method |
| hfus | 24.72 | kJ/mol | Joback Method |
| hvap | 57.90 | kJ/mol | Joback Method |
| log10ws | -3.42 | | Crippen Method |
| logp | 2.542 | | Crippen Method |
| mcvol | 162.360 | ml/mol | McGowan Method |
| pc | 2940.89 | kPa | Joback Method |
| rinpol | 2023.00 | | NIST Webbook |
| rinpol | 2023.00 | | NIST Webbook |
| tb | 613.79 | K | Joback Method |
| tc | 843.88 | K | Joback Method |
| tf | 390.31 | K | Joback Method |
| vc | 0.602 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 396.51 | J/mol×K | 613.79 | Joback Method |
| cpg | 411.30 | J/mol×K | 652.14 | Joback Method |
| cpg | 424.97 | J/mol×K | 690.49 | Joback Method |
| cpg | 437.61 | J/mol×K | 728.83 | Joback Method |
| cpg | 449.29 | J/mol×K | 767.18 | Joback Method |
| cpg | 460.10 | J/mol×K | 805.53 | Joback Method |

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|---|---|---|---|---|
| cpg | 470.13 | J/mol×K | 843.88 | Joback Method |

# Sources

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|---|---|
| **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=C3815245&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |