# Adamantane-1-carboxamide, N-(1-naphthyl)-

**Other names:** 1-Adamantanecarboxamide, N-(1-naphthyl)-
**Inchi:** InChI=1S/C21H23NO/c23-20(21-11-14-8-15(12-21)10-16(9-14)13-21)22-19-7-3-5-17-4-1
**InchiKey:** RJZASJFLYAWUDU-UHFFFAOYSA-N
**Formula:** C21H23NO
**SMILES:** O=C(Nc1cccc2ccccc12)C12CC3CC(CC(C3)C1)C2
**Mol. weight [g/mol]:** 305.41
**CAS:** 121768-37-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 452.79 | kJ/mol | Joback Method |
| hf | 87.39 | kJ/mol | Joback Method |
| hfus | 34.59 | kJ/mol | Joback Method |
| hvap | 78.55 | kJ/mol | Joback Method |
| log10ws | -5.96 | | Crippen Method |
| logp | 4.995 | | Crippen Method |
| mcvol | 242.500 | ml/mol | McGowan Method |
| pc | 2123.64 | kPa | Joback Method |
| rinpol | 2941.00 | | NIST Webbook |
| tb | 854.62 | K | Joback Method |
| tc | 1108.38 | K | Joback Method |
| tf | 570.62 | K | Joback Method |
| vc | 0.926 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 799.41 | J/mol×K | 854.62 | Joback Method |
| cpg | 820.21 | J/mol×K | 896.91 | Joback Method |
| cpg | 840.91 | J/mol×K | 939.21 | Joback Method |
| cpg | 861.91 | J/mol×K | 981.50 | Joback Method |
| cpg | 883.58 | J/mol×K | 1023.79 | Joback Method |
| cpg | 906.33 | J/mol×K | 1066.09 | Joback Method |
| cpg | 930.54 | J/mol×K | 1108.38 | 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=C121768374&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 |

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