# Cyclobutanecarboxamide, N,N-dinonyl-

**Inchi:** InChI=1S/C23H45NO/c1-3-5-7-9-11-13-15-20-24(23(25)22-18-17-19-22)21-16-14-12-10-
**InchiKey:** HRYWIIHQUINOQB-UHFFFAOYSA-N
**Formula:** C23H45NO
**SMILES:** CCCCCCCCCN(CCCCCCCCC)C(=O)C1CCC1
**Mol. weight [g/mol]:** 351.61

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 173.29 | kJ/mol | Joback Method |
| hf | -496.46 | kJ/mol | Joback Method |
| hfus | 55.98 | kJ/mol | Joback Method |
| hvap | 75.67 | kJ/mol | Joback Method |
| log10ws | -7.45 | | Crippen Method |
| logp | 7.116 | | Crippen Method |
| mcvol | 335.620 | ml/mol | McGowan Method |
| pc | 970.49 | kPa | Joback Method |
| rinpol | 2506.00 | | NIST Webbook |
| tb | 802.96 | K | Joback Method |
| tc | 986.68 | K | Joback Method |
| tf | 445.79 | K | Joback Method |
| vc | 1.296 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1093.85 | J/mol×K | 802.96 | Joback Method |
| cpg | 1115.37 | J/mol×K | 833.58 | Joback Method |
| cpg | 1135.79 | J/mol×K | 864.20 | Joback Method |
| cpg | 1155.14 | J/mol×K | 894.82 | Joback Method |
| cpg | 1173.51 | J/mol×K | 925.44 | Joback Method |
| cpg | 1190.95 | J/mol×K | 956.06 | Joback Method |
| cpg | 1207.53 | J/mol×K | 986.68 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U308604&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |

# Legend

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|---|---|
| **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 |