# p-Chloro-N,N-dimethylaniline

**Inchi:** InChI=1S/C8H10ClN/c1-10(2)8-5-3-7(9)4-6-8/h3-6H,1-2H3
**InchiKey:** IONGEXNDPXANJD-UHFFFAOYSA-N
**Formula:** C8H10ClN
**SMILES:** CN(C)c1ccc(Cl)cc1
**Mol. weight [g/mol]:** 155.63

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| af | 0.4080 | | Cheméo Relay (1.0) |
| affp | 922.90 | kJ/mol | NIST Webbook |
| basg | 896.40 | kJ/mol | NIST Webbook |
| gf | 218.11 | kJ/mol | Joback Method |
| hf | 41.25 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 17.35 | kJ/mol | Joback Method |
| hvap | 58.37 | kJ/mol | Cheméo Relay (1.0) |
| ie | 7.38 | eV | NIST Webbook |
| ie | 7.20 ± 0.10 | eV | NIST Webbook |
| log10ws | -2.86 | | Cheméo Relay (1.0) |
| logp | 2.406 | | Crippen Method |
| mcvol | 122.040 | ml/mol | McGowan Method |
| pc | 3423.86 | kPa | Joback Method |
| tb | 504.20 | K | NIST Webbook |
| tc | 710.54 | K | Cheméo Relay (1.0) |
| tf | 342.19 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 232.64 | J/mol×K | 463.97 | Joback Method |
| cpg | 245.45 | J/mol×K | 499.82 | Joback Method |
| cpg | 257.46 | J/mol×K | 535.68 | Joback Method |
| cpg | 268.70 | J/mol×K | 571.53 | Joback Method |
| cpg | 279.22 | J/mol×K | 607.39 | Joback Method |
| cpg | 289.03 | J/mol×K | 643.24 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 298.20 | J/mol×K | 679.10 | Joback Method |

# Sources

**Cheméo Relay (1.0):**

**Cheméo Relay (1.0, beta):**

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C698691&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

# Legend

**af:** Acentric Factor
**affp:** Proton affinity
**basg:** Gas basicity
**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
**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

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