# 4-Chloro-3-methylaniline

**Other names:** Benzenamine, 4-chloro-3-methyl-
3-Methyl-4-chloroaniline
4-Chloro-3-methylaniline
5-Amino-2-chlorotoluene
**Inchi:** InChI=1S/C7H8ClN/c1-5-4-6(9)2-3-7(5)8/h2-4H,9H2,1H3
**InchiKey:** HIHCTGNZNHSZPP-UHFFFAOYSA-N
**Formula:** C7H8ClN
**SMILES:** Cc1cc(N)ccc1Cl
**Mol. weight [g/mol]:** 141.60

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hf | 13.69 | kJ/mol | Cheméo Relay (1.0) |
| hfus | 16.54 | kJ/mol | Joback Method |
| hvap | 61.22 | kJ/mol | Cheméo Relay (1.0) |
| ie | 7.80 | eV | Cheméo Relay (1.0) |
| log10ws | -2.07 | | Cheméo Relay (1.0) |
| logp | 2.231 | | Crippen Method |
| mcvol | 107.950 | ml/mol | McGowan Method |
| tb | 516.26 | K | Cheméo Relay (1.0) |
| tf | 331.91 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 211.08 | J/mol×K | 506.16 | Joback Method |
| cpg | 221.33 | J/mol×K | 545.35 | Joback Method |
| cpg | 230.94 | J/mol×K | 584.55 | Joback Method |
| cpg | 239.95 | J/mol×K | 623.74 | Joback Method |
| cpg | 248.37 | J/mol×K | 662.94 | Joback Method |
| cpg | 256.22 | J/mol×K | 702.13 | Joback Method |
| cpg | 263.54 | J/mol×K | 741.33 | Joback Method |

# Sources

| | |
|---|---|
| **Cheméo Relay (1.0, beta):** | |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C7149759&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):** | |

# 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 |
| **tb:** | Normal Boiling Point Temperature |
| **tf:** | Normal melting (fusion) point |