# Benzenamine, 2-chloro-6-methyl-

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|---|---|
| **Other names:** | o-Toluidine, 6-chloro- |
| | 2-Amino-3-chlorotoluene |
| | 2-Chloro-6-methylaniline |
| | 2-Methyl-6-chloroaniline |
| | 3-Chloro-2-aminotoluene |
| | 6-Chloro-o-toluidine |
| | 6-Chloro-o-toluidine (NH2=1) |
| | 6-Chloro-2-toluidine |
| | 6-Chloro-2-methylaniline |
| | NSC 6012 |
| | (2-Chloro-6-methylphenyl)amine |
| | 6-ChIoro-o-toluidine |
| **Inchi:** | InChI=1S/C7H8ClN/c1-5-3-2-4-6(8)7(5)9/h2-4H,9H2,1H3 |
| **InchiKey:** | WFNLHDJJZSJARK-UHFFFAOYSA-N |
| **Formula:** | C7H8ClN |
| **SMILES:** | Cc1cccc(Cl)c1N |
| **Mol. weight [g/mol]:** | 141.60 |
| **CAS:** | 87-63-8 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 155.73 | kJ/mol | Joback Method |
| hf | 43.83 | kJ/mol | Joback Method |
| hfus | 16.54 | kJ/mol | Joback Method |
| hvap | 49.80 | kJ/mol | Joback Method |
| log10ws | -2.27 | | Crippen Method |
| logp | 2.231 | | Crippen Method |
| mcvol | 107.950 | ml/mol | McGowan Method |
| pc | 4062.13 | kPa | Joback Method |
| rinpol | 1249.00 | | NIST Webbook |
| rinpol | 1249.00 | | NIST Webbook |
| rinpol | 1249.00 | | NIST Webbook |
| ripol | 2127.00 | | NIST Webbook |
| ripol | 2127.00 | | NIST Webbook |
| tb | 488.20 | K | NIST Webbook |
| tc | 741.33 | K | Joback Method |
| tf | 333.29 | K | Joback Method |

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|---|---|---|---|
| vc | 0.398 | m3/kmol | Joback Method |

# 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

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C87638&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

**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
**ripol:** Polar retention indices
**tb:** Normal Boiling Point Temperature

| | |
|---|---|
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |