# Benzene, 3-chloro-1-methyl-4-(1-methylethenyl)

**Inchi:** InChI=1S/C10H11Cl/c1-7(2)9-5-4-8(3)6-10(9)11/h4-6H,1H2,2-3H3
**InchiKey:** SIZLKNFNLHRNGT-UHFFFAOYSA-N
**Formula:** C10H11Cl
**SMILES:** C=C(C)c1ccc(C)cc1Cl
**Mol. weight [g/mol]:** 166.65

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 193.83 | kJ/mol | Joback Method |
| hf | 63.76 | kJ/mol | Joback Method |
| hfus | 16.53 | kJ/mol | Joback Method |
| hvap | 45.25 | kJ/mol | Joback Method |
| log10ws | -3.87 | | Crippen Method |
| logp | 3.682 | | Crippen Method |
| mcvol | 135.940 | ml/mol | McGowan Method |
| pc | 2868.87 | kPa | Joback Method |
| rinpol | 1189.00 | | NIST Webbook |
| tb | 498.83 | K | Joback Method |
| tc | 720.87 | K | Joback Method |
| tf | 268.12 | K | Joback Method |
| vc | 0.518 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 267.83 | J/mol×K | 498.83 | Joback Method |
| cpg | 280.90 | J/mol×K | 535.84 | Joback Method |
| cpg | 293.21 | J/mol×K | 572.84 | Joback Method |
| cpg | 304.77 | J/mol×K | 609.85 | Joback Method |
| cpg | 315.62 | J/mol×K | 646.86 | Joback Method |
| cpg | 325.79 | J/mol×K | 683.86 | Joback Method |
| cpg | 335.33 | J/mol×K | 720.87 | Joback Method |

# Sources

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|---|---|
| **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=R132113&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# 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 |