# Benzenemethanol, 4-chloro-«alpha»-methyl-

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|---|---|
| **Other names:** | Benzyl alcohol, p-chloro-«alpha»-methyl-<br>«alpha»-(p-Chlorophenyl)ethanol<br>p-Chloro-«alpha»-methylbenzyl alcohol<br>1-(p-Chlorophenyl)ethanol<br>1-(4-Chlorophenyl)ethanol<br>1-p-Chlorophenylethyl alcohol<br>4-Chlorophenylmethylcarbinol<br>4-Chloro-alpha-methylbenzyl alcohol<br>4-chloro-«alpha»-methylbenzyl alcohol |
| **Inchi:** | InChI=1S/C8H9ClO/c1-6(10)7-2-4-8(9)5-3-7/h2-6,10H,1H3 |
| **InchiKey:** | MVOSNPUNXINWAD-UHFFFAOYSA-N |
| **Formula:** | C8H9ClO |
| **SMILES:** | CC(O)c1ccc(Cl)cc1 |
| **Mol. weight [g/mol]:** | 156.61 |
| **CAS:** | 3391-10-4 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -31.93 | kJ/mol | Joback Method |
| hf | -156.64 | kJ/mol | Joback Method |
| hfus | 14.89 | kJ/mol | Joback Method |
| hvap | 57.02 | kJ/mol | Joback Method |
| log10ws | -2.68 | | Crippen Method |
| logp | 2.393 | | Crippen Method |
| mcvol | 117.930 | ml/mol | McGowan Method |
| pc | 3872.29 | kPa | Joback Method |
| rinpol | 1226.30 | | NIST Webbook |
| rinpol | 1226.30 | | NIST Webbook |
| tb | 543.27 | K | Joback Method |
| tc | 751.23 | K | Joback Method |
| tf | 294.60 | K | Joback Method |
| vc | 0.438 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 247.37 | J/mol×K | 543.27 | Joback Method |
| cpg | 291.43 | J/mol×K | 716.57 | Joback Method |
| cpg | 283.72 | J/mol×K | 681.91 | Joback Method |
| cpg | 275.49 | J/mol×K | 647.25 | Joback Method |
| cpg | 266.70 | J/mol×K | 612.59 | Joback Method |
| cpg | 257.34 | J/mol×K | 577.93 | Joback Method |
| cpg | 298.63 | J/mol×K | 751.23 | Joback Method |
| dvisc | 0.0001162 | Pa×s | 543.27 | Joback Method |
| dvisc | 0.0001827 | Pa×s | 501.82 | Joback Method |
| dvisc | 0.0003115 | Pa×s | 460.38 | Joback Method |
| dvisc | 0.0005903 | Pa×s | 418.94 | Joback Method |
| dvisc | 0.0012872 | Pa×s | 377.49 | Joback Method |
| dvisc | 0.0034019 | Pa×s | 336.05 | Joback Method |
| dvisc | 0.0118182 | Pa×s | 294.60 | Joback Method |

# Sources

**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**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=C3391104&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# Legend

**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**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

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