# Salicyl alcohol

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|---|---|
| **Other names:** | 2-Hydroxybenzenemethanol |
| | 2-Hydroxybenzyl alcohol |
| | 2-Hydroxymethylphenol |
| | 2-Methylolphenol |
| | Benzenemethanol, 2-hydroxy- |
| | Benzyl alcohol, o-hydroxy- |
| | Diathesin |
| | NSC 3814 |
| | SAL |
| | Salicain |
| | Salicylic alcohol |
| | Saligenin |
| | Saligenine |
| | Saligenol |
| | o-(Hydroxymethyl)phenol |
| | o-Hydroxybenzyl alcohol |
| | o-Methylolphenol |
| | «alpha»,2-Dihydroxytoluene |
| | «alpha»-Hydroxy-o-cresol |
| | Â«alphaÂ»,2-Dihydroxytoluene |
| | Â«alphaÂ»-Hydroxy-o-cresol |
| **Inchi:** | InChI=1S/C7H8O2/c8-5-6-3-1-2-4-7(6)9/h1-4,8-9H,5H2 |
| **InchiKey:** | CQRYARSYNCAZFO-UHFFFAOYSA-N |
| **Formula:** | C7H8O2 |
| **SMILES:** | OCc1ccccc1O |
| **Mol. weight [g/mol]:** | 124.14 |
| **CAS:** | 90-01-7 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -170.97 | kJ/mol | Joback Method |
| hf | -280.82 | kJ/mol | Joback Method |
| hfus | 17.80 | kJ/mol | Joback Method |
| hvap | 63.15 | kJ/mol | Joback Method |
| ie | 8.58 | eV | NIST Webbook |
| log10ws | -0.29 | | Aqueous Solubility Prediction Method |

| | | | |
|---|---|---|---|
| logp | 0.884 | | Crippen Method |
| mcvol | 97.470 | ml/mol | McGowan Method |
| pc | 5756.64 | kPa | Joback Method |
| tb | 559.04 | K | Joback Method |
| tc | 771.80 | K | Joback Method |
| tf | 358.82 | K | Aqueous Solubility Prediction Method |
| vc | 0.304 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 225.28 | J/mol×K | 559.04 | Joback Method |
| cpg | 233.79 | J/mol×K | 594.50 | Joback Method |
| cpg | 241.68 | J/mol×K | 629.96 | Joback Method |
| cpg | 249.02 | J/mol×K | 665.42 | Joback Method |
| cpg | 255.87 | J/mol×K | 700.88 | Joback Method |
| cpg | 262.29 | J/mol×K | 736.34 | Joback Method |
| cpg | 268.35 | J/mol×K | 771.80 | Joback Method |
| dvisc | 0.0033694 | Pa×s | 367.61 | Joback Method |
| dvisc | 0.0010805 | Pa×s | 399.51 | Joback Method |
| dvisc | 0.0004100 | Pa×s | 431.42 | Joback Method |
| dvisc | 0.0001778 | Pa×s | 463.32 | Joback Method |
| dvisc | 0.0000858 | Pa×s | 495.23 | Joback Method |
| dvisc | 0.0000453 | Pa×s | 527.13 | Joback Method |
| dvisc | 0.0000257 | Pa×s | 559.04 | Joback Method |
| hfust | 21.50 | kJ/mol | 358.30 | NIST Webbook |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C90017&Units=SI

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method

**Aqueous Solubility Prediction Method:** http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

# 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 |
| **hfust:** | Enthalpy of fusion at a given temperature |
| **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 |
| **vc:** | Critical Volume |