

# Benzaldehyde, 2-hydroxy, 5-hexyl

|                             |   |
|-----------------------------|---|
| <b>Inchi:</b>               | InChI=1S/C13H18O2/c1-2-3-4-5-6-11-7-8-13(15)12(9-11)10-14/h7-10,15H,2-6H2,1H3 |
| <b>InchiKey:</b>            | AKLLVPQDWXRGLG-UHFFFAOYSA-N   |
| <b>Formula:</b>             | C13H18O2  |
| <b>SMILES:</b>              | CCCCCCc1ccc(O)c(C=O)c1  |
| <b>Mol. weight [g/mol]:</b> | 206.28  |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -92.78  | kJ/mol  | Joback Method  |
| hf            | -349.48 | kJ/mol  | Joback Method  |
| hfus          | 31.15   | kJ/mol  | Joback Method  |
| hvap          | 67.20   | kJ/mol  | Joback Method  |
| log10ws       | -3.74   |         | Crippen Method |
| logp          | 3.328   |         | Crippen Method |
| mcvol         | 177.710 | ml/mol  | McGowan Method |
| pc            | 2693.00 | kPa     | Joback Method  |
| rinpol        | 1884.00 |         | NIST Webbook   |
| tb            | 657.78  | K       | Joback Method  |
| tc            | 868.90  | K       | Joback Method  |
| tf            | 428.93  | K       | Joback Method  |
| vc            | 0.638   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 472.92    | J/molxK | 657.78          | Joback Method |
| cpg           | 535.00    | J/molxK | 833.71          | Joback Method |
| cpg           | 523.91    | J/molxK | 798.53          | Joback Method |
| cpg           | 512.22    | J/molxK | 763.34          | Joback Method |
| cpg           | 499.88    | J/molxK | 728.15          | Joback Method |
| cpg           | 486.80    | J/molxK | 692.97          | Joback Method |
| cpg           | 545.58    | J/molxK | 868.90          | Joback Method |
| dvisc         | 0.0000258 | Paxs    | 657.78          | Joback Method |
| dvisc         | 0.0000383 | Paxs    | 619.64          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0000599 | Paxs | 581.50 | Joback Method |
| dvisc | 0.0000997 | Paxs | 543.36 | Joback Method |
| dvisc | 0.0001793 | Paxs | 505.21 | Joback Method |
| dvisc | 0.0003547 | Paxs | 467.07 | Joback Method |
| dvisc | 0.0007924 | Paxs | 428.93 | Joback Method |

## Sources

|                        |   |
|------------------------|---|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R256883&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R256883&amp;Units=SI</a> |

## Legend

|                 |   |
|-----------------|---|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>dvisc:</b>   | Dynamic viscosity                               |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rinpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

Latest version available from:

<https://www.chemeo.com/cid/35-115-5/Benzaldehyde-2-hydroxy-5-hexyl.pdf>

Generated by Cheméo on 2024-04-18 18:45:21.668815821 +0000 UTC m=+15755170.589393134.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.