

# 4-hydroxybutyl hexanoate

|                      |                                                                 |
|----------------------|-----------------------------------------------------------------|
| Inchi:               | InChI=1S/C10H20O3/c1-2-3-4-7-10(12)13-9-6-5-8-11/h11H,2-9H2,1H3 |
| InchiKey:            | CXCIGAYDAQVVRU-UHFFFAOYSA-N                                     |
| Formula:             | C10H20O3                                                        |
| SMILES:              | CCCCC(=O)OCCCCO                                                 |
| Mol. weight [g/mol]: | 188.26                                                          |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -337.42 | kJ/mol  | Joback Method  |
| hf            | -646.76 | kJ/mol  | Joback Method  |
| hfus          | 28.53   | kJ/mol  | Joback Method  |
| hvap          | 63.69   | kJ/mol  | Joback Method  |
| log10ws       | -2.13   |         | Crippen Method |
| logp          | 1.882   |         | Crippen Method |
| mcvol         | 165.070 | ml/mol  | McGowan Method |
| pc            | 2402.92 | kPa     | Joback Method  |
| ripol         | 1666.00 |         | NIST Webbook   |
| tb            | 596.67  | K       | Joback Method  |
| tc            | 763.64  | K       | Joback Method  |
| tf            | 335.44  | K       | Joback Method  |
| vc            | 0.638   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 428.51    | J/mol×K | 596.67          | Joback Method |
| cpg           | 440.83    | J/mol×K | 624.50          | Joback Method |
| cpg           | 452.65    | J/mol×K | 652.33          | Joback Method |
| cpg           | 463.99    | J/mol×K | 680.16          | Joback Method |
| cpg           | 474.85    | J/mol×K | 707.98          | Joback Method |
| cpg           | 485.23    | J/mol×K | 735.81          | Joback Method |
| cpg           | 495.14    | J/mol×K | 763.64          | Joback Method |
| dvisc         | 0.0060280 | Pa×s    | 335.44          | Joback Method |
| dvisc         | 0.0019204 | Pa×s    | 378.98          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0007745 | Pa×s | 422.52 | Joback Method |
| dvisc | 0.0003701 | Pa×s | 466.05 | Joback Method |
| dvisc | 0.0002006 | Pa×s | 509.59 | Joback Method |
| dvisc | 0.0001198 | Pa×s | 553.13 | Joback Method |
| dvisc | 0.0000771 | Pa×s | 596.67 | 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=R519109&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R519109&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>ripol:</b>   | 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                                 |

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