

# Benzoic acid, 3-hydroxy-, 2-methylbutyl ester

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Inchi:               | InChI=1S/C12H16O3/c1-3-9(2)8-15-12(14)10-5-4-6-11(13)7-10/h4-7,9,13H,3,8H2,1-2H3 |
| InchiKey:            | SXMWLCNWSBJUPJ-UHFFFAOYSA-N                                                      |
| Formula:             | C12H16O3                                                                         |
| SMILES:              | CCC(C)COC(=O)c1cccc(O)c1                                                         |
| Mol. weight [g/mol]: | 208.25                                                                           |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -228.41 | kJ/mol  | Joback Method  |
| hf            | -481.87 | kJ/mol  | Joback Method  |
| hfus          | 25.92   | kJ/mol  | Joback Method  |
| hvap          | 66.36   | kJ/mol  | Joback Method  |
| log10ws       | -2.69   |         | Crippen Method |
| logp          | 2.595   |         | Crippen Method |
| mcvol         | 169.490 | ml/mol  | McGowan Method |
| pc            | 2966.57 | kPa     | Joback Method  |
| rinpol        | 1783.00 |         | NIST Webbook   |
| rinpol        | 1783.00 |         | NIST Webbook   |
| tb            | 657.11  | K       | Joback Method  |
| tc            | 877.01  | K       | Joback Method  |
| tf            | 420.30  | K       | Joback Method  |
| vc            | 0.584   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value     | Unit    | Temperature [K] | Source        |
|---------------|-----------|---------|-----------------|---------------|
| cpg           | 448.59    | J/mol×K | 657.11          | Joback Method |
| cpg           | 462.38    | J/mol×K | 693.76          | Joback Method |
| cpg           | 475.31    | J/mol×K | 730.41          | Joback Method |
| cpg           | 487.44    | J/mol×K | 767.06          | Joback Method |
| cpg           | 498.85    | J/mol×K | 803.71          | Joback Method |
| cpg           | 509.60    | J/mol×K | 840.36          | Joback Method |
| cpg           | 519.75    | J/mol×K | 877.01          | Joback Method |
| dvisc         | 0.0008293 | Pa×s    | 420.30          | Joback Method |

|       |           |      |        |               |
|-------|-----------|------|--------|---------------|
| dvisc | 0.0003381 | Pa×s | 459.77 | Joback Method |
| dvisc | 0.0001589 | Pa×s | 499.24 | Joback Method |
| dvisc | 0.0000834 | Pa×s | 538.71 | Joback Method |
| dvisc | 0.0000478 | Pa×s | 578.17 | Joback Method |
| dvisc | 0.0000294 | Pa×s | 617.64 | Joback Method |
| dvisc | 0.0000192 | Pa×s | 657.11 | Joback Method |

## Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <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=U375419&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U375419&amp;Units=SI</a> |
| <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>                         |

## 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                                 |

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