

# Benzoic acid, 3-butylamino-, butyl ester

|                             |                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------|
| <b>Inchi:</b>               | InChI=1S/C15H23NO2/c1-3-5-10-16-14-9-7-8-13(12-14)15(17)18-11-6-4-2/h7-9,12,16H,1 |
| <b>InchiKey:</b>            | VOPAHYQWXPGOEN-UHFFFAOYSA-N                                                       |
| <b>Formula:</b>             | C15H23NO2                                                                         |
| <b>SMILES:</b>              | CCCCNc1cccc(C(=O)OCCCC)c1                                                         |
| <b>Mol. weight [g/mol]:</b> | 249.35                                                                            |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | 33.67   | kJ/mol               | Joback Method  |
| hf            | -319.20 | kJ/mol               | Joback Method  |
| hfus          | 36.14   | kJ/mol               | Joback Method  |
| hvap          | 67.51   | kJ/mol               | Joback Method  |
| log10ws       | -4.23   |                      | Crippen Method |
| logp          | 3.855   |                      | Crippen Method |
| mvol          | 215.870 | ml/mol               | McGowan Method |
| pc            | 1918.62 | kPa                  | Joback Method  |
| rinpol        | 2080.00 |                      | NIST Webbook   |
| rinpol        | 2080.00 |                      | NIST Webbook   |
| tb            | 700.72  | K                    | Joback Method  |
| tc            | 899.86  | K                    | Joback Method  |
| tf            | 422.57  | K                    | Joback Method  |
| vc            | 0.827   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 602.88 | J/mol×K | 700.72          | Joback Method |
| cpg           | 618.93 | J/mol×K | 733.91          | Joback Method |
| cpg           | 634.05 | J/mol×K | 767.10          | Joback Method |
| cpg           | 648.26 | J/mol×K | 800.29          | Joback Method |
| cpg           | 661.58 | J/mol×K | 833.48          | Joback Method |
| cpg           | 674.06 | J/mol×K | 866.67          | Joback Method |
| cpg           | 685.70 | J/mol×K | 899.86          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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=U374540&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U374540&amp;Units=SI</a> |

# Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <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>hvp:</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>rinp:</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.cheméo.com/cid/83-552-7/Benzoic-acid-3-butylamino-butyl-ester.pdf>

Generated by Cheméo on 2024-05-01 03:21:33.681725864 +0000 UTC m=+16822942.602303191.

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