

# «beta»-Alanine, N-(2,3,4-trifluorobenzoyl)-, ethyl ester

|                      |  |
|----------------------|--|
| Inchi:               | InChI=1S/C12H12F3NO3/c1-2-19-9(17)5-6-16-12(18)7-3-4-8(13)11(15)10(7)14/h3-4H,2, |
| InchiKey:            | GGRSNVJKBJMWCU-UHFFFAOYSA-N  |
| Formula:             | C12H12F3NO3  |
| SMILES:              | CCOC(=O)CCNC(=O)c1ccc(F)c(F)c1F  |
| Mol. weight [g/mol]: | 275.22   |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -724.20 | kJ/mol               | Joback Method  |
| hf            | -981.13 | kJ/mol               | Joback Method  |
| hfus          | 38.43   | kJ/mol               | Joback Method  |
| hvap          | 66.45   | kJ/mol               | Joback Method  |
| log10ws       | -3.35   |                      | Crippen Method |
| logp          | 1.787   |                      | Crippen Method |
| mvol          | 180.480 | ml/mol               | McGowan Method |
| pc            | 2274.07 | kPa                  | Joback Method  |
| rinpol        | 1763.00 |                      | NIST Webbook   |
| rinpol        | 1763.00 |                      | NIST Webbook   |
| tb            | 693.72  | K                    | Joback Method  |
| tc            | 885.41  | K                    | Joback Method  |
| tf            | 465.50  | K                    | Joback Method  |
| vc            | 0.719   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 483.62 | J/mol×K | 693.72          | Joback Method |
| cpg           | 494.95 | J/mol×K | 725.67          | Joback Method |
| cpg           | 505.61 | J/mol×K | 757.62          | Joback Method |
| cpg           | 515.61 | J/mol×K | 789.57          | Joback Method |
| cpg           | 524.95 | J/mol×K | 821.51          | Joback Method |
| cpg           | 533.65 | J/mol×K | 853.46          | Joback Method |
| cpg           | 541.70 | J/mol×K | 885.41          | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <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=U321688&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U321688&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</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>                                     |

# 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>h vap:</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>r in pol:</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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