

# Benzamide, 2,4,5-trifluoro-3-methoxy-N-methyl-

|                      |   |
|----------------------|---|
| Inchi:               | InChI=1S/C9H8F3NO2/c1-13-9(14)4-3-5(10)7(12)8(15-2)6(4)11/h3H,1-2H3,(H,13,14) |
| InchiKey:            | UDMIWHRILLSBES-UHFFFAOYSA-N   |
| Formula:             | C9H8F3NO2   |
| SMILES:              | CNC(=O)c1cc(F)c(F)c(OC)c1F  |
| Mol. weight [g/mol]: | 219.16  |

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -630.17 | kJ/mol               | Joback Method  |
| hf            | -818.10 | kJ/mol               | Joback Method  |
| hfus          | 28.68   | kJ/mol               | Joback Method  |
| hvap          | 53.69   | kJ/mol               | Joback Method  |
| log10ws       | -2.93   |                      | Crippen Method |
| logp          | 1.472   |                      | Crippen Method |
| mcvol         | 136.640 | ml/mol               | McGowan Method |
| pc            | 2808.38 | kPa                  | Joback Method  |
| rinpol        | 1493.00 |                      | NIST Webbook   |
| rinpol        | 1493.00 |                      | NIST Webbook   |
| tb            | 576.19  | K                    | Joback Method  |
| tc            | 767.48  | K                    | Joback Method  |
| tf            | 394.28  | K                    | Joback Method  |
| vc            | 0.544   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 323.73 | J/mol×K | 576.19          | Joback Method |
| cpg           | 333.73 | J/mol×K | 608.07          | Joback Method |
| cpg           | 343.27 | J/mol×K | 639.95          | Joback Method |
| cpg           | 352.36 | J/mol×K | 671.83          | Joback Method |
| cpg           | 360.98 | J/mol×K | 703.72          | Joback Method |
| cpg           | 369.14 | J/mol×K | 735.60          | Joback Method |
| cpg           | 376.84 | J/mol×K | 767.48          | 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=U407634&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U407634&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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</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>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>rinpola:</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/120-453-5/Benzamide-2-4-5-trifluoro-3-methoxy-N-methyl.pdf>

Generated by Cheméo on 2024-05-01 07:36:15.086027024 +0000 UTC m=+16838224.006604339.

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