

# Glycine, n-methyl-n-methoxycarbonyl-, butyl ester

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| Inchi:               | InChI=1S/C9H17NO4/c1-4-5-6-14-8(11)7-10(2)9(12)13-3/h4-7H2,1-3H3 |
| InchiKey:            | JTNWHBZXMUFBTK-UHFFFAOYSA-N                                      |
| Formula:             | C9H17NO4                                                         |
| SMILES:              | CCCCOC(=O)CN(C)C(=O)OC                                           |
| Mol. weight [g/mol]: | 203.24                                                           |

## Physical Properties

| Property code | Value   | Unit    | Source             |
|---------------|---------|---------|--------------------|
| af            | 0.6677  |         | Cheméo Relay (1.0) |
| hf            | -795.19 | kJ/mol  | Cheméo Relay (1.0) |
| hfus          | 27.66   | kJ/mol  | Joback Method      |
| hvap          | 70.59   | kJ/mol  | Cheméo Relay (1.0) |
| ie            | 9.15    | eV      | Cheméo Relay (1.0) |
| log10ws       | -0.97   |         | Cheméo Relay (1.0) |
| logp          | 1.028   |         | Crippen Method     |
| mcvol         | 162.530 | ml/mol  | McGowan Method     |
| pc            | 2520.12 | kPa     | Joback Method      |
| rinpol        | 1396.00 |         | NIST Webbook       |
| tb            | 523.19  | K       | Cheméo Relay (1.0) |
| tc            | 692.19  | K       | Cheméo Relay (1.0) |
| tf            | 246.40  | K       | Cheméo Relay (1.0) |
| vc            | 0.624   | m3/kmol | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 403.49 | J/mol×K | 570.34          | Joback Method |
| cpg           | 416.47 | J/mol×K | 600.34          | Joback Method |
| cpg           | 428.89 | J/mol×K | 630.34          | Joback Method |
| cpg           | 440.76 | J/mol×K | 660.34          | Joback Method |
| cpg           | 452.08 | J/mol×K | 690.34          | Joback Method |
| cpg           | 462.84 | J/mol×K | 720.34          | Joback Method |
| cpg           | 473.05 | J/mol×K | 750.33          | 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>Cheméo Relay (1.0):</b>       |                                                                                                                                           |
| <b>Cheméo Relay (1.0, beta):</b> |                                                                                                                                           |
| <b>NIST Webbook:</b>             | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U320604&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U320604&amp;Units=SI</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>                     |

# Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>af:</b>      | Acentric Factor                                 |
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <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>ie:</b>      | Ionization energy                               |
| <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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