

# DL-Alanine, N-methyl-N-(but-3-yn-1-yloxy carbonyl)-, tetradecyl ester

InChI: CN(C)C(=O)OCCCCCCCCCCCCCCC  
InChIKey: HBQGZGIEFZOUJG-UHFFFAOYSA-N

Formula: C<sub>23</sub>H<sub>41</sub>NO<sub>4</sub>

SMILES: C#CCCCOC(=O)N(C)C(C)C(=O)OCCCCCCCCCCCCCCC

Mol. weight [g/mol]: 395.58

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | 6.35    | kJ/mol               | Joback Method  |
| hf            | -653.50 | kJ/mol               | Joback Method  |
| hfus          | 63.37   | kJ/mol               | Joback Method  |
| hvap          | 86.62   | kJ/mol               | Joback Method  |
| log10ws       | -6.63   |                      | Crippen Method |
| logp          | 5.711   |                      | Crippen Method |
| mvol          | 351.190 | ml/mol               | McGowan Method |
| pc            | 988.88  | kPa                  | Joback Method  |
| rinpol        | 2606.00 |                      | NIST Webbook   |
| rinpol        | 2606.00 |                      | NIST Webbook   |
| tb            | 880.34  | K                    | Joback Method  |
| tc            | 1077.89 | K                    | Joback Method  |
| tf            | 557.73  | K                    | Joback Method  |
| vc            | 1.345   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value   | Unit    | Temperature [K] | Source        |
|---------------|---------|---------|-----------------|---------------|
| cpg           | 1139.99 | J/mol×K | 880.34          | Joback Method |
| cpg           | 1158.58 | J/mol×K | 913.27          | Joback Method |
| cpg           | 1175.95 | J/mol×K | 946.19          | Joback Method |
| cpg           | 1192.16 | J/mol×K | 979.12          | Joback Method |
| cpg           | 1207.23 | J/mol×K | 1012.04         | Joback Method |
| cpg           | 1221.21 | J/mol×K | 1044.97         | Joback Method |
| cpg           | 1234.15 | J/mol×K | 1077.89         | Joback Method |

# Sources

|                        |   |
|------------------------|---|
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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=U392711&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U392711&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>                                 |

# 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.chemeo.com/cid/99-077-8/DL-Alanine-N-methyl-N-but-3-yn-1-yloxycarbonyl-tetradecyl-ester.pdf>

Generated by Cheméo on 2024-04-26 17:38:37.594683314 +0000 UTC m=+16442366.515260641.

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