

# L-Norvaline, N-butoxycarbonyl-, tetradecyl ester

**Inchi:** InChI=1S/C24H47NO4/c1-4-7-9-10-11-12-13-14-15-16-17-18-21-28-23(26)22(19-6-3)25-24  
**InchiKey:** ZMMTYOUQQZBHTJ-UHFFFAOYSA-N  
**Formula:** C24H47NO4  
**SMILES:** CCCCCCCCCCCCCCOC(=O)C(CCC)NC(=O)OCCCC  
**Mol. weight [g/mol]:** 413.64

## Physical Properties

| Property code | Value    | Unit    | Source             |
|---------------|----------|---------|--------------------|
| af            | 1.1953   |         | Cheméo Relay (1.0) |
| hf            | -1148.65 | kJ/mol  | Cheméo Relay (1.0) |
| hfus          | 65.07    | kJ/mol  | Joback Method      |
| hvap          | 121.53   | kJ/mol  | Cheméo Relay (1.0) |
| ie            | 9.17     | eV      | Cheméo Relay (1.0) |
| log10ws       | -6.68    |         | Cheméo Relay (1.0) |
| logp          | 6.926    |         | Crippen Method     |
| mcvol         | 373.880  | ml/mol  | McGowan Method     |
| pc            | 860.49   | kPa     | Joback Method      |
| tb            | 635.97   | K       | Cheméo Relay (1.0) |
| tc            | 839.20   | K       | Cheméo Relay (1.0) |
| tf            | 313.42   | K       | Cheméo Relay (1.0) |
| vc            | 1.419    | m3/kmol | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value   | Unit    | Temperature [K] | Source        |
|---------------|---------|---------|-----------------|---------------|
| cpg           | 1283.65 | J/mol×K | 950.83          | Joback Method |
| cpg           | 1303.36 | J/mol×K | 987.11          | Joback Method |
| cpg           | 1321.47 | J/mol×K | 1023.38         | Joback Method |
| cpg           | 1338.01 | J/mol×K | 1059.66         | Joback Method |
| cpg           | 1353.04 | J/mol×K | 1095.94         | Joback Method |
| cpg           | 1366.59 | J/mol×K | 1132.21         | Joback Method |
| cpg           | 1378.72 | J/mol×K | 1168.49         | 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>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=U320780&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U320780&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>                                     |

# 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>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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