

# I-Norvaline, N-ethoxycarbonyl-, nonyl ester

Inchi:

InchiKey:

Formula:

SMILES:

Mol. weight [g/mol]:

InChI=1S/C17H33NO4/c1-4-7-8-9-10-11-12-14-22-16(19)15(13-5-2)18-17(20)21-6-3/h15

ICBBNLGLBVUYHW-UHFFFAOYSA-N

C17H33NO4

CCCCCCCCCOC(=O)C(CCC)NC(=O)OCC

315.45

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | -288.63 | kJ/mol  | Joback Method  |
| hf            | -835.62 | kJ/mol  | Joback Method  |
| hfus          | 46.94   | kJ/mol  | Joback Method  |
| hvap          | 77.80   | kJ/mol  | Joback Method  |
| log10ws       | -4.94   |         | Crippen Method |
| logp          | 4.195   |         | Crippen Method |
| mcvol         | 275.250 | ml/mol  | McGowan Method |
| pc            | 1334.91 | kPa     | Joback Method  |
| rinpol        | 1919.00 |         | NIST Webbook   |
| rinpol        | 1919.00 |         | NIST Webbook   |
| tb            | 790.67  | K       | Joback Method  |
| tc            | 975.04  | K       | Joback Method  |
| tf            | 463.33  | K       | Joback Method  |
| vc            | 1.065   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 853.75 | J/mol×K | 790.67          | Joback Method |
| cpg           | 870.46 | J/mol×K | 821.40          | Joback Method |
| cpg           | 886.20 | J/mol×K | 852.13          | Joback Method |
| cpg           | 900.99 | J/mol×K | 882.86          | Joback Method |
| cpg           | 914.84 | J/mol×K | 913.59          | Joback Method |
| cpg           | 927.76 | J/mol×K | 944.31          | Joback Method |
| cpg           | 939.76 | J/mol×K | 975.04          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U320706&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U320706&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.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>                     |

# 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>rlnpol:</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/119-394-3/l-Norvaline-N-ethoxycarbonyl-nonyl-ester.pdf>

Generated by Cheméo on 2025-12-23 01:19:10.372299733 +0000 UTC m=+6200947.902340388.

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