

# L-Leucine, N-isobutoxycarbonyl-N-methyl-, heptyl ester

**Inchi:** InChI=1S/C19H37NO4/c1-7-8-9-10-11-12-23-18(21)17(13-15(2)3)20(6)19(22)24-14-16(4)  
**InchiKey:** ACKYEAJGFNRLEM-UHFFFAOYSA-N  
**Formula:** C19H37NO4  
**SMILES:** CCCCCCOC(=O)C(CC(C)C)N(C)C(=O)OCC(C)C  
**Mol. weight [g/mol]:** 343.51

## Physical Properties

| Property code | Value    | Unit   | Source             |
|---------------|----------|--------|--------------------|
| hf            | -1028.76 | kJ/mol | Cheméo Relay (1.0) |
| hfus          | 42.99    | kJ/mol | Joback Method      |
| hvap          | 90.79    | kJ/mol | Cheméo Relay (1.0) |
| log10ws       | -4.47    |        | Cheméo Relay (1.0) |
| logp          | 4.639    |        | Crippen Method     |
| mcvol         | 303.430  | ml/mol | McGowan Method     |
| rinpol        | 2058.00  |        | NIST Webbook       |
| rinpol        | 2058.00  |        | NIST Webbook       |
| tb            | 603.62   | K      | Cheméo Relay (1.0) |
| tf            | 253.31   | K      | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value   | Unit    | Temperature [K] | Source        |
|---------------|---------|---------|-----------------|---------------|
| cpg           | 953.34  | J/mol×K | 797.82          | Joback Method |
| cpg           | 971.63  | J/mol×K | 828.65          | Joback Method |
| cpg           | 988.84  | J/mol×K | 859.49          | Joback Method |
| cpg           | 1005.00 | J/mol×K | 890.32          | Joback Method |
| cpg           | 1020.12 | J/mol×K | 921.15          | Joback Method |
| cpg           | 1034.23 | J/mol×K | 951.99          | Joback Method |
| cpg           | 1047.35 | J/mol×K | 982.82          | Joback Method |

# Sources

|                                  |                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>             | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U321873&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U321873&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>                     |
| <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> |                                                                                                                                           |

## Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <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>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>rinpola:</b> | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tf:</b>      | Normal melting (fusion) point                   |

Latest version available from:

<https://www.chemeo.com/cid/99-615-0/L-Leucine-N-isobutoxycarbonyl-N-methyl-heptyl-ester.pdf>

Generated by Cheméo on 2026-07-21 23:16:50.80304133 +0000 UTC m=+186906.644926727.

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