

# 1-Aminocyclopentanecarboxylic acid, N-(vinylloxycarbonyl)-, heptyl ester

**Inchi:** InChI=1S/C16H27NO4/c1-3-5-6-7-10-13-21-14(18)16(11-8-9-12-16)17-15(19)20-4-2/h4H  
**InchiKey:** LQGNZKYPFKIMBV-UHFFFAOYSA-N  
**Formula:** C16H27NO4  
**SMILES:** C=COC(=O)NC1(C(=O)OCCCCCCC)CCCC1  
**Mol. weight [g/mol]:** 297.39

## Physical Properties

| Property code | Value   | Unit                 | Source         |
|---------------|---------|----------------------|----------------|
| gf            | -175.71 | kJ/mol               | Joback Method  |
| hf            | -608.55 | kJ/mol               | Joback Method  |
| hfus          | 34.23   | kJ/mol               | Joback Method  |
| hvap          | 74.39   | kJ/mol               | Joback Method  |
| log10ws       | -4.77   |                      | Crippen Method |
| logp          | 3.682   |                      | Crippen Method |
| mvol          | 246.000 | ml/mol               | McGowan Method |
| pc            | 1762.45 | kPa                  | Joback Method  |
| rinpol        | 1990.00 |                      | NIST Webbook   |
| rinpol        | 1990.00 |                      | NIST Webbook   |
| tb            | 780.43  | K                    | Joback Method  |
| tc            | 981.61  | K                    | Joback Method  |
| tf            | 500.10  | K                    | Joback Method  |
| vc            | 0.934   | m <sup>3</sup> /kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 755.72 | J/mol×K | 780.43          | Joback Method |
| cpg           | 772.94 | J/mol×K | 813.96          | Joback Method |
| cpg           | 789.49 | J/mol×K | 847.49          | Joback Method |
| cpg           | 805.46 | J/mol×K | 881.02          | Joback Method |
| cpg           | 820.94 | J/mol×K | 914.55          | Joback Method |
| cpg           | 836.02 | J/mol×K | 948.08          | Joback Method |
| cpg           | 850.81 | J/mol×K | 981.61          | 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=U392607&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U392607&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>                                 |

# 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>rinpola:</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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