

# P-nitro carbanilic acid, n-hexyl ester

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Other names:         | Hexyl N-(4-nitrophenyl) carbamate                                                |
| Inchi:               | InChI=1S/C13H18N2O4/c1-2-3-4-5-10-19-13(16)14-11-6-8-12(9-7-11)15(17)18/h6-9H,2- |
| InchiKey:            | OFSOQJSHCDPUIU-UHFFFAOYSA-N                                                      |
| Formula:             | C13H18N2O4                                                                       |
| SMILES:              | CCCCCOC(=O)Nc1ccc([N+](=O)[O-])cc1                                               |
| Mol. weight [g/mol]: | 266.29                                                                           |
| CAS:                 | 87458-01-3                                                                       |

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | 52.38   | kJ/mol  | Joback Method  |
| hf            | -288.68 | kJ/mol  | Joback Method  |
| hfus          | 42.32   | kJ/mol  | Joback Method  |
| hvap          | 79.65   | kJ/mol  | Joback Method  |
| log10ws       | -4.48   |         | Crippen Method |
| logp          | 3.724   |         | Crippen Method |
| mcvol         | 205.110 | ml/mol  | McGowan Method |
| pc            | 2313.61 | kPa     | Joback Method  |
| tb            | 806.80  | K       | Joback Method  |
| tc            | 1030.70 | K       | Joback Method  |
| tf            | 543.64  | K       | Joback Method  |
| vc            | 0.796   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 602.79 | J/mol×K | 806.80          | Joback Method |
| cpg           | 615.71 | J/mol×K | 844.12          | Joback Method |
| cpg           | 627.61 | J/mol×K | 881.43          | Joback Method |
| cpg           | 638.54 | J/mol×K | 918.75          | Joback Method |
| cpg           | 648.51 | J/mol×K | 956.07          | Joback Method |
| cpg           | 657.57 | J/mol×K | 993.39          | Joback Method |
| cpg           | 665.75 | J/mol×K | 1030.70         | Joback Method |
| hfust         | 32.74  | kJ/mol  | 376.70          | NIST Webbook  |

# Sources

|                        |                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C87458013&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C87458013&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>hfust:</b>   | Enthalpy of fusion at a given temperature       |
| <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>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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