# N-(n-propyl)-dodecanamide

**Inchi:** InChI=1S/C15H31NO/c1-3-5-6-7-8-9-10-11-12-13-15(17)16-14-4-2/h3-14H2,1-2H3,(H,16
**InchiKey:** AUYWNLPGKFYZFF-UHFFFAOYSA-N
**Formula:** C15H31NO
**SMILES:** CCCCCCCCCCCC(=O)NCCC
**Mol. weight [g/mol]:** 241.41
**CAS:** 110790-31-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 35.89 | kJ/mol | Joback Method |
| hf | -412.04 | kJ/mol | Joback Method |
| hfus | 41.30 | kJ/mol | Joback Method |
| hvap | 62.17 | kJ/mol | Joback Method |
| log10ws | -5.07 | | Crippen Method |
| logp | 4.434 | | Crippen Method |
| mcvol | 233.760 | ml/mol | McGowan Method |
| pc | 1499.99 | kPa | Joback Method |
| tb | 646.64 | K | Joback Method |
| tc | 817.28 | K | Joback Method |
| tf | 361.40 | K | Joback Method |
| vc | 0.916 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 652.39 | J/mol×K | 646.64 | Joback Method |
| cpg | 669.78 | J/mol×K | 675.08 | Joback Method |
| cpg | 686.40 | J/mol×K | 703.52 | Joback Method |
| cpg | 702.27 | J/mol×K | 731.96 | Joback Method |
| cpg | 717.40 | J/mol×K | 760.40 | Joback Method |
| cpg | 731.82 | J/mol×K | 788.84 | Joback Method |
| cpg | 745.57 | J/mol×K | 817.28 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C110790313&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |