# Propanamide, 2-methyl-N-ethyl-N-decyl-

**Inchi:** InChI=1S/C16H33NO/c1-5-7-8-9-10-11-12-13-14-17(6-2)16(18)15(3)4/h15H,5-14H2,1-4H
**InchiKey:** RWYCCJXINGJXLY-UHFFFAOYSA-N
**Formula:** C16H33NO
**SMILES:** CCCCCCCCCCN(CC)C(=O)C(C)C
**Mol. weight [g/mol]:** 255.44

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 63.26 | kJ/mol | Joback Method |
| hf | -423.90 | kJ/mol | Joback Method |
| hfus | 38.29 | kJ/mol | Joback Method |
| hvap | 59.61 | kJ/mol | Joback Method |
| log10ws | -4.62 | | Crippen Method |
| logp | 4.632 | | Crippen Method |
| mcvol | 247.850 | ml/mol | McGowan Method |
| pc | 1387.11 | kPa | Joback Method |
| rinpol | 2071.00 | | NIST Webbook |
| rinpol | 2071.00 | | NIST Webbook |
| tb | 631.35 | K | Joback Method |
| tc | 799.87 | K | Joback Method |
| tf | 337.48 | K | Joback Method |
| vc | 0.950 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 685.65 | J/mol×K | 631.35 | Joback Method |
| cpg | 704.37 | J/mol×K | 659.44 | Joback Method |
| cpg | 722.24 | J/mol×K | 687.52 | Joback Method |
| cpg | 739.30 | J/mol×K | 715.61 | Joback Method |
| cpg | 755.57 | J/mol×K | 743.70 | Joback Method |
| cpg | 771.08 | J/mol×K | 771.78 | Joback Method |
| cpg | 785.85 | J/mol×K | 799.87 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U415348&Units=SI |

# 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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |