

Propanamide, N,N-dibutyl-3-cyclopentyl-

| | |
|-----------------------------|--|
| Inchi: | InChI=1S/C16H31NO/c1-3-5-13-17(14-6-4-2)16(18)12-11-15-9-7-8-10-15/h15H,3-14H2,1 |
| InchiKey: | XWPONJHSUQRXHJ-UHFFFAOYSA-N |
| Formula: | C16H31NO |
| SMILES: | CCCCN(CCCC)C(=O)CCC1CCCC1 |
| Mol. weight [g/mol]: | 253.42 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 102.25 | kJ/mol | Joback Method |
| hf | -358.14 | kJ/mol | Joback Method |
| hfus | 35.75 | kJ/mol | Joback Method |
| hvap | 60.26 | kJ/mol | Joback Method |
| log10ws | -4.52 | | Crippen Method |
| logp | 4.386 | | Crippen Method |
| mcvol | 236.990 | ml/mol | McGowan Method |
| pc | 1583.49 | kPa | Joback Method |
| rinpol | 1897.00 | | NIST Webbook |
| rinpol | 1897.00 | | NIST Webbook |
| tb | 647.07 | K | Joback Method |
| tc | 831.29 | K | Joback Method |
| tf | 363.38 | K | Joback Method |
| vc | 0.896 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 677.64 | J/mol×K | 647.07 | Joback Method |
| cpg | 697.96 | J/mol×K | 677.77 | Joback Method |
| cpg | 717.22 | J/mol×K | 708.48 | Joback Method |
| cpg | 735.45 | J/mol×K | 739.18 | Joback Method |
| cpg | 752.71 | J/mol×K | 769.89 | Joback Method |
| cpg | 769.02 | J/mol×K | 800.59 | Joback Method |
| cpg | 784.44 | J/mol×K | 831.29 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U308280&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| Crippen Method: | https://www.cheméo.com/doc/models/crippen_log10ws |
| Joback Method: | https://en.wikipedia.org/wiki/Joback_method |

Legend

| | |
|------------------|---|
| 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 |
| h vap: | 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 |
| r in pol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

Latest version available from:

<https://www.cheméo.com/cid/82-329-6/Propanamide-N-N-dibutyl-3-cyclopentyl.pdf>

Generated by Cheméo on 2024-05-03 07:51:47.586161483 +0000 UTC m=+17011956.506738805.

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