# Pentanamide, N-decyl-N-methyl-5-bromo-

**Inchi:** InChI=1S/C16H32BrNO/c1-3-4-5-6-7-8-9-12-15-18(2)16(19)13-10-11-14-17/h3-15H2,1-2
**InchiKey:** WJVMVKIZEGKNEQ-UHFFFAOYSA-N
**Formula:** C16H32BrNO
**SMILES:** CCCCCCCCCCN(C)C(=O)CCCCBr
**Mol. weight [g/mol]:** 334.33

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 80.02 | kJ/mol | Joback Method |
| hf | -392.29 | kJ/mol | Joback Method |
| hfus | 47.10 | kJ/mol | Joback Method |
| hvap | 66.43 | kJ/mol | Joback Method |
| log10ws | -5.30 | | Crippen Method |
| logp | 5.151 | | Crippen Method |
| mcvol | 265.350 | ml/mol | McGowan Method |
| pc | 1452.35 | kPa | Joback Method |
| rinpol | 2291.00 | | NIST Webbook |
| tb | 697.95 | K | Joback Method |
| tc | 875.62 | K | Joback Method |
| tf | 412.28 | K | Joback Method |
| vc | 1.018 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 739.59 | J/mol×K | 697.95 | Joback Method |
| cpg | 756.88 | J/mol×K | 727.56 | Joback Method |
| cpg | 773.32 | J/mol×K | 757.17 | Joback Method |
| cpg | 788.95 | J/mol×K | 786.78 | Joback Method |
| cpg | 803.80 | J/mol×K | 816.40 | Joback Method |
| cpg | 817.91 | J/mol×K | 846.01 | Joback Method |
| cpg | 831.33 | J/mol×K | 875.62 | 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=U308261&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 |