# Benzamide, 4-butyl-N-(hept-2-yl)-

**Inchi:** InChI=1S/C18H29NO/c1-4-6-8-9-15(3)19-18(20)17-13-11-16(12-14-17)10-7-5-2/h11-15H
**InchiKey:** HOYVROFMCOGLJY-UHFFFAOYSA-N
**Formula:** C18H29NO
**SMILES:** CCCCCC(C)NC(=O)c1ccc(CCCC)cc1
**Mol. weight [g/mol]:** 275.43

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 161.49 | kJ/mol | Joback Method |
| hf | -254.18 | kJ/mol | Joback Method |
| hfus | 39.20 | kJ/mol | Joback Method |
| hvap | 71.39 | kJ/mol | Joback Method |
| log10ws | -6.08 | | Crippen Method |
| logp | 4.728 | | Crippen Method |
| mcvol | 252.270 | ml/mol | McGowan Method |
| pc | 1542.71 | kPa | Joback Method |
| rinpol | 2271.00 | | NIST Webbook |
| rinpol | 2271.00 | | NIST Webbook |
| tb | 746.50 | K | Joback Method |
| tc | 944.50 | K | Joback Method |
| tf | 419.15 | K | Joback Method |
| vc | 0.971 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 742.07 | J/mol×K | 746.50 | Joback Method |
| cpg | 759.66 | J/mol×K | 779.50 | Joback Method |
| cpg | 776.22 | J/mol×K | 812.50 | Joback Method |
| cpg | 791.79 | J/mol×K | 845.50 | Joback Method |
| cpg | 806.42 | J/mol×K | 878.50 | Joback Method |
| cpg | 820.14 | J/mol×K | 911.50 | Joback Method |
| cpg | 833.01 | J/mol×K | 944.50 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U407451&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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |