# Benzamide, 2-chloro-N-(2-chlorobenzoyl)-N-pentyl-

**Inchi:** InChI=1S/C19H19Cl2NO2/c1-2-3-8-13-22(18(23)14-9-4-6-11-16(14)20)19(24)15-10-5-7-

**InchiKey:** PTHFHLVQJKXVNI-UHFFFAOYSA-N

**Formula:** C19H19Cl2NO2

**SMILES:** CCCCCN(C(=O)c1ccccc1Cl)C(=O)c1ccccc1Cl

**Mol. weight [g/mol]:** 364.27

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 143.74 | kJ/mol | Joback Method |
| hf | -174.48 | kJ/mol | Joback Method |
| hfus | 46.88 | kJ/mol | Joback Method |
| hvap | 88.07 | kJ/mol | Joback Method |
| log10ws | -6.63 | | Crippen Method |
| logp | 5.466 | | Crippen Method |
| mcvol | 268.650 | ml/mol | McGowan Method |
| pc | 1795.46 | kPa | Joback Method |
| rinpol | 2609.00 | | NIST Webbook |
| rinpol | 2609.00 | | NIST Webbook |
| tb | 892.48 | K | Joback Method |
| tc | 1126.24 | K | Joback Method |
| tf | 573.94 | K | Joback Method |
| vc | 1.012 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 756.77 | J/mol×K | 892.48 | Joback Method |
| cpg | 769.37 | J/mol×K | 931.44 | Joback Method |
| cpg | 780.91 | J/mol×K | 970.40 | Joback Method |
| cpg | 791.49 | J/mol×K | 1009.36 | Joback Method |
| cpg | 801.21 | J/mol×K | 1048.32 | Joback Method |
| cpg | 810.14 | J/mol×K | 1087.28 | Joback Method |
| cpg | 818.38 | J/mol×K | 1126.24 | Joback Method |

# Sources

| | |
|---|---|
| **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=U407498&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |
| **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 |