# Benzamide, 3-chloro-2-fluoro-N-(3-chloro-2-fluorobenzoyl)-N-c

**Inchi:** InChI=1S/C24H27Cl2F2NO2/c1-2-3-4-5-6-7-8-9-16-29(23(30)17-12-10-14-19(25)21(17)2

**InchiKey:** VRSAEYKIDHDRRJ-UHFFFAOYSA-N

**Formula:** C24H27Cl2F2NO2

**SMILES:** CCCCCCCCCCN(C(=O)c1cccc(Cl)c1F)C(=O)c1cccc(Cl)c1F

**Mol. weight [g/mol]:** 470.38

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -223.04 | kJ/mol | Joback Method |
| hf | -692.84 | kJ/mol | Joback Method |
| hfus | 65.22 | kJ/mol | Joback Method |
| hvap | 98.89 | kJ/mol | Joback Method |
| log10ws | -9.38 | | Crippen Method |
| logp | 7.695 | | Crippen Method |
| mcvol | 342.640 | ml/mol | McGowan Method |
| pc | 1141.34 | kPa | Joback Method |
| rinpol | 3072.00 | | NIST Webbook |
| rinpol | 3072.00 | | NIST Webbook |
| tb | 1015.38 | K | Joback Method |
| tc | 1244.24 | K | Joback Method |
| tf | 656.51 | K | Joback Method |
| vc | 1.327 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1060.59 | J/mol×K | 1015.38 | Joback Method |
| cpg | 1073.55 | J/mol×K | 1053.52 | Joback Method |
| cpg | 1085.47 | J/mol×K | 1091.67 | Joback Method |
| cpg | 1096.44 | J/mol×K | 1129.81 | Joback Method |
| cpg | 1106.55 | J/mol×K | 1167.95 | Joback Method |
| cpg | 1115.89 | J/mol×K | 1206.09 | Joback Method |
| cpg | 1124.56 | J/mol×K | 1244.24 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U407846&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 |

# 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 |