# Benzamide, N-heptyl-N-octyl-2,6-difluoro-

**Inchi:** InChI=1S/C22H35F2NO/c1-3-5-7-9-11-13-18-25(17-12-10-8-6-4-2)22(26)21-19(23)15-14
**InchiKey:** QAPFWRDMYOCOHE-UHFFFAOYSA-N
**Formula:** C22H35F2NO
**SMILES:** CCCCCCCCN(CCCCCCC)C(=O)c1c(F)cccc1F
**Mol. weight [g/mol]:** 367.52

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -180.25 | kJ/mol | Joback Method |
| hf | -721.09 | kJ/mol | Joback Method |
| hfus | 56.78 | kJ/mol | Joback Method |
| hvap | 75.32 | kJ/mol | Joback Method |
| log10ws | -7.72 | | Crippen Method |
| logp | 6.738 | | Crippen Method |
| mcvol | 312.170 | ml/mol | McGowan Method |
| pc | 1069.36 | kPa | Joback Method |
| rinpol | 2369.00 | | NIST Webbook |
| rinpol | 2369.00 | | NIST Webbook |
| tb | 804.25 | K | Joback Method |
| tc | 989.59 | K | Joback Method |
| tf | 472.74 | K | Joback Method |
| vc | 1.220 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 971.53 | J/mol×K | 804.25 | Joback Method |
| cpg | 989.73 | J/mol×K | 835.14 | Joback Method |
| cpg | 1006.92 | J/mol×K | 866.03 | Joback Method |
| cpg | 1023.15 | J/mol×K | 896.92 | Joback Method |
| cpg | 1038.46 | J/mol×K | 927.81 | Joback Method |
| cpg | 1052.89 | J/mol×K | 958.70 | Joback Method |
| cpg | 1066.50 | J/mol×K | 989.59 | 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=U308669&Units=SI |

# 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 |