# N,N-Difluorobenzylamine

**Inchi:** InChI=1S/C7H7F2N/c8-10(9)6-7-4-2-1-3-5-7/h1-5H,6H2
**InchiKey:** QSSYZZLBAAQNKO-UHFFFAOYSA-N
**Formula:** C7H7F2N
**SMILES:** FN(F)Cc1ccccc1
**Mol. weight [g/mol]:** 143.13
**CAS:** 23162-99-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chl | -4076.00 ± 3.00 | kJ/mol | NIST Webbook |
| gf | -158.37 | kJ/mol | Joback Method |
| hf | 7.00 ± 4.00 | kJ/mol | NIST Webbook |
| hfl | -37.00 ± 3.00 | kJ/mol | NIST Webbook |
| hfus | 17.11 | kJ/mol | Joback Method |
| hvap | 44.00 ± 1.00 | kJ/mol | NIST Webbook |
| log10ws | -2.61 | | Crippen Method |
| logp | 2.258 | | Crippen Method |
| mcvol | 99.250 | ml/mol | McGowan Method |
| pc | 3668.65 | kPa | Joback Method |
| tb | 397.22 | K | Joback Method |
| tc | 583.72 | K | Joback Method |
| tf | 228.72 | K | Joback Method |
| vc | 0.373 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 181.99 | J/mol×K | 397.22 | Joback Method |
| cpg | 193.54 | J/mol×K | 428.30 | Joback Method |
| cpg | 204.43 | J/mol×K | 459.39 | Joback Method |
| cpg | 214.67 | J/mol×K | 490.47 | Joback Method |
| cpg | 224.30 | J/mol×K | 521.55 | Joback Method |
| cpg | 233.34 | J/mol×K | 552.64 | Joback Method |
| cpg | 241.81 | J/mol×K | 583.72 | Joback Method |

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|---|---|---|---|---|
| hvapt | 77.80 | kJ/mol | 323.00 | NIST Webbook |

# Sources

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|---|---|
| **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=C23162994&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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|---|---|
| **chl:** | Standard liquid enthalpy of combustion |
| **cpg:** | Ideal gas heat capacity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfl:** | Liquid phase enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **hvapt:** | Enthalpy of vaporization at a given temperature |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |