# Difluoramine

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|---|---|
| **Other names:** | Difluoroamine |
| | FLUORIMDE |
| | Fluorimide |
| | HNF2 |
| **Inchi:** | InChI=1S/F2HN/c1-3-2/h3H |
| **InchiKey:** | ULFHSQLFQYTZLS-UHFFFAOYSA-N |
| **Formula:** | F2HN |
| **SMILES:** | FNF |
| **Mol. weight [g/mol]:** | 53.01 |
| **CAS:** | 10405-27-3 |

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -351.11 | kJ/mol | Joback Method |
| hf | -382.08 | kJ/mol | Joback Method |
| hfus | 7.01 | kJ/mol | Joback Method |
| hvap | 20.40 | kJ/mol | Joback Method |
| ie | 11.53 ± 0.08 | eV | NIST Webbook |
| ie | 11.60 | eV | NIST Webbook |
| ie | 12.38 | eV | NIST Webbook |
| log10ws | -0.70 | | Crippen Method |
| logp | 0.345 | | Crippen Method |
| mcvol | 24.380 | ml/mol | McGowan Method |
| pc | 5962.94 | kPa | Joback Method |
| tb | 250.00 ± 3.00 | K | NIST Webbook |
| tb | 250.00 | K | KDB |
| tc | 403.00 | K | KDB |
| tf | 142.00 ± 3.00 | K | NIST Webbook |
| vc | 0.106 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 36.18 | J/mol×K | 248.11 | Joback Method |

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|---|---|---|---|---|
| cpg | 38.01 | J/mol×K | 272.27 | Joback Method |
| cpg | 39.78 | J/mol×K | 296.43 | Joback Method |
| cpg | 41.50 | J/mol×K | 320.59 | Joback Method |
| cpg | 43.16 | J/mol×K | 344.75 | Joback Method |
| cpg | 44.77 | J/mol×K | 368.91 | Joback Method |
| cpg | 46.32 | J/mol×K | 393.07 | Joback Method |

# Sources

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|---|---|
| **KDB:** | https://www.cheric.org/files/research/kdb/mol/mol1908.mol |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C10405273&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 |
| **ie:** | Ionization energy |
| **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 |