# Benzamide, 3-fluoro-5-trifluoromethyl-N-(3-fluoro-5-trifluorom

**Inchi:** InChI=1S/C30H35F8NO2/c1-2-3-4-5-6-7-8-9-10-11-12-13-16-39(27(40)21-17-22(29(33,3

**InchiKey:** IEFHXGVWVDXVDP-UHFFFAOYSA-N

**Formula:** C30H35F8NO2

**SMILES:** CCCCCCCCCCCCCCN(C(=O)c1cc(F)cc(C(F)(F)F)c1)C(=O)c1cc(F)ccc1C(F)(F)F

**Mol. weight [g/mol]:** 593.59

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1311.84 | kJ/mol | Joback Method |
| hf | -1979.36 | kJ/mol | Joback Method |
| hfus | 76.01 | kJ/mol | Joback Method |
| hvap | 95.98 | kJ/mol | Joback Method |
| log10ws | -11.89 | | Crippen Method |
| logp | 9.986 | | Crippen Method |
| mcvol | 413.320 | ml/mol | McGowan Method |
| pc | 732.84 | kPa | Joback Method |
| rinpol | 2649.00 | | NIST Webbook |
| rinpol | 2649.00 | | NIST Webbook |
| tb | 1066.96 | K | Joback Method |
| tc | 1324.97 | K | Joback Method |
| tf | 672.67 | K | Joback Method |
| vc | 1.651 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1423.91 | J/mol×K | 1066.96 | Joback Method |
| cpg | 1441.85 | J/mol×K | 1109.96 | Joback Method |
| cpg | 1458.78 | J/mol×K | 1152.96 | Joback Method |
| cpg | 1474.96 | J/mol×K | 1195.96 | Joback Method |
| cpg | 1490.62 | J/mol×K | 1238.97 | Joback Method |
| cpg | 1506.01 | J/mol×K | 1281.97 | Joback Method |
| cpg | 1521.36 | J/mol×K | 1324.97 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U407881&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 |