# Benzamide, 2,5-di(trifluoromethyl)-N-pentyl-

**Inchi:** InChI=1S/C14H15F6NO/c1-2-3-4-7-21-12(22)10-8-9(13(15,16)17)5-6-11(10)14(18,19)20
**InchiKey:** XFEQGKNTHDYBKO-UHFFFAOYSA-N
**Formula:** C14H15F6NO
**SMILES:** CCCCCNC(=O)c1cc(C(F)(F)F)ccc1C(F)(F)F
**Mol. weight [g/mol]:** 327.27

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1042.56 | kJ/mol | Joback Method |
| hf | -1371.97 | kJ/mol | Joback Method |
| hfus | 35.63 | kJ/mol | Joback Method |
| hvap | 56.05 | kJ/mol | Joback Method |
| log10ws | -5.70 | | Crippen Method |
| logp | 4.644 | | Crippen Method |
| mcvol | 206.530 | ml/mol | McGowan Method |
| pc | 1711.78 | kPa | Joback Method |
| rinpol | 1573.00 | | NIST Webbook |
| rinpol | 1573.00 | | NIST Webbook |
| tb | 649.56 | K | Joback Method |
| tc | 827.26 | K | Joback Method |
| tf | 409.97 | K | Joback Method |
| vc | 0.839 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 575.13 | J/mol×K | 649.56 | Joback Method |
| cpg | 588.35 | J/mol×K | 679.18 | Joback Method |
| cpg | 600.74 | J/mol×K | 708.79 | Joback Method |
| cpg | 612.34 | J/mol×K | 738.41 | Joback Method |
| cpg | 623.20 | J/mol×K | 768.03 | Joback Method |
| cpg | 633.37 | J/mol×K | 797.64 | Joback Method |
| cpg | 642.91 | J/mol×K | 827.26 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U407920&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 |