# Pentanamide, N-(4-fluorophenyl)-

**Inchi:** InChI=1S/C11H14FNO/c1-2-3-4-11(14)13-10-7-5-9(12)6-8-10/h5-8H,2-4H2,1H3,(H,13,14
**InchiKey:** OJKJOPVTPZLJJV-UHFFFAOYSA-N
**Formula:** C11H14FNO
**SMILES:** CCCCC(=O)Nc1ccc(F)cc1
**Mol. weight [g/mol]:** 195.23

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -89.82 | kJ/mol | Joback Method |
| hf | -300.53 | kJ/mol | Joback Method |
| hfus | 27.68 | kJ/mol | Joback Method |
| hvap | 55.38 | kJ/mol | Joback Method |
| log10ws | -3.26 | | Crippen Method |
| logp | 2.954 | | Crippen Method |
| mcvol | 155.410 | ml/mol | McGowan Method |
| pc | 2693.00 | kPa | Joback Method |
| rinpol | 1610.00 | | NIST Webbook |
| rinpol | 1610.00 | | NIST Webbook |
| tb | 586.05 | K | Joback Method |
| tc | 788.78 | K | Joback Method |
| tf | 355.85 | K | Joback Method |
| vc | 0.603 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 378.93 | J/mol×K | 586.05 | Joback Method |
| cpg | 392.58 | J/mol×K | 619.84 | Joback Method |
| cpg | 405.43 | J/mol×K | 653.63 | Joback Method |
| cpg | 417.51 | J/mol×K | 687.41 | Joback Method |
| cpg | 428.86 | J/mol×K | 721.20 | Joback Method |
| cpg | 439.50 | J/mol×K | 754.99 | Joback Method |
| cpg | 449.46 | J/mol×K | 788.78 | Joback Method |

# Sources

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|---|---|
| **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=U306890&Units=SI |

# 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 |