# Acetamide, N-(4-fluorophenyl)-2,2,2-trichloro-

**Inchi:** InChI=1S/C8H5Cl3FNO/c9-8(10,11)7(14)13-6-3-1-5(12)2-4-6/h1-4H,(H,13,14)
**InchiKey:** LITIWTUEINGYRF-UHFFFAOYSA-N
**Formula:** C8H5Cl3FNO
**SMILES:** O=C(Nc1ccc(F)cc1)C(Cl)(Cl)Cl
**Mol. weight [g/mol]:** 256.49

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -148.03 | kJ/mol | Joback Method |
| hf | -294.58 | kJ/mol | Joback Method |
| hfus | 25.08 | kJ/mol | Joback Method |
| hvap | 60.56 | kJ/mol | Joback Method |
| log10ws | -3.57 | | Crippen Method |
| logp | 3.134 | | Crippen Method |
| mcvol | 149.860 | ml/mol | McGowan Method |
| pc | 3337.38 | kPa | Joback Method |
| rinpol | 1587.00 | | NIST Webbook |
| tb | 626.47 | K | Joback Method |
| tc | 865.04 | K | Joback Method |
| tf | 414.22 | K | Joback Method |
| vc | 0.571 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 313.27 | J/mol×K | 626.47 | Joback Method |
| cpg | 322.17 | J/mol×K | 666.23 | Joback Method |
| cpg | 330.21 | J/mol×K | 705.99 | Joback Method |
| cpg | 337.45 | J/mol×K | 745.76 | Joback Method |
| cpg | 343.98 | J/mol×K | 785.52 | Joback Method |
| cpg | 349.85 | J/mol×K | 825.28 | Joback Method |
| cpg | 355.14 | J/mol×K | 865.04 | Joback Method |

# Sources

| | |
|---|---|
| **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=U307215&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 |