# Urea, 1-(2-fluoroethyl)-3-(2-norbornanyl)-

**Inchi:** InChI=1S/C10H17FN2O/c11-3-4-12-10(14)13-9-6-7-1-2-8(9)5-7/h7-9H,1-6H2,(H2,12,13,
**InchiKey:** WDOJNUSZUOZHTL-UHFFFAOYSA-N
**Formula:** C10H17FN2O
**SMILES:** O=C(NCCF)NC1CC2CCC1C2
**Mol. weight [g/mol]:** 200.25
**CAS:** 13907-96-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -9.94 | kJ/mol | Joback Method |
| hf | -332.38 | kJ/mol | Joback Method |
| hfus | 31.77 | kJ/mol | Joback Method |
| hvap | 56.34 | kJ/mol | Joback Method |
| log10ws | -2.41 | | Crippen Method |
| logp | 1.444 | | Crippen Method |
| mcvol | 153.340 | ml/mol | McGowan Method |
| pc | 2823.32 | kPa | Joback Method |
| tb | 594.76 | K | Joback Method |
| tc | 793.85 | K | Joback Method |
| tf | 386.42 | K | Joback Method |
| vc | 0.595 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 430.05 | J/mol×K | 594.76 | Joback Method |
| cpg | 446.24 | J/mol×K | 627.94 | Joback Method |
| cpg | 461.42 | J/mol×K | 661.12 | Joback Method |
| cpg | 475.67 | J/mol×K | 694.31 | Joback Method |
| cpg | 489.04 | J/mol×K | 727.49 | Joback Method |
| cpg | 501.59 | J/mol×K | 760.67 | Joback Method |
| cpg | 513.37 | J/mol×K | 793.85 | Joback Method |

# Sources

| | |
|---|---|
| **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=C13907965&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

| | |
|---|---|
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |