# (1-Penten-2-yl) hydantoin

**Inchi:** InChI=1S/C8H12N2O2/c1-3-4-5(2)6-7(11)10-8(12)9-6/h6H,2-4H2,1H3,(H2,9,10,11,12)
**InchiKey:** UYGMZBYLCPNOJJ-UHFFFAOYSA-N
**Formula:** C8H12N2O2
**SMILES:** C=C(CCC)C1NC(=O)NC1=O
**Mol. weight [g/mol]:** 168.19
**CAS:** 116435-48-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 62.56 | kJ/mol | Joback Method |
| hf | -232.11 | kJ/mol | Joback Method |
| hfus | 26.02 | kJ/mol | Joback Method |
| hvap | 55.08 | kJ/mol | Joback Method |
| log10ws | -1.94 | | Crippen Method |
| logp | 0.551 | | Crippen Method |
| mcvol | 131.520 | ml/mol | McGowan Method |
| pc | 3722.56 | kPa | Joback Method |
| tb | 627.02 | K | Joback Method |
| tc | 871.97 | K | Joback Method |
| tf | 521.60 | K | Joback Method |
| vc | 0.494 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 341.21 | J/mol×K | 627.02 | Joback Method |
| cpg | 356.85 | J/mol×K | 667.84 | Joback Method |
| cpg | 371.64 | J/mol×K | 708.67 | Joback Method |
| cpg | 385.52 | J/mol×K | 749.49 | Joback Method |
| cpg | 398.44 | J/mol×K | 790.32 | Joback Method |
| cpg | 410.33 | J/mol×K | 831.14 | Joback Method |
| cpg | 421.13 | J/mol×K | 871.97 | Joback Method |

# Sources

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|---|---|
| **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=C116435484&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

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