# 3,4-Dimethoxyphenylacethydrazide

**Other names:** 3,4-Dimethoxyphenyl acetic hydrazide
Homoveratric hydrazide
3,4-Dimethoxyphenylacetic acid hydrazide
**Inchi:** InChI=1S/C10H14N2O3/c1-14-8-4-3-7(5-9(8)15-2)6-10(13)12-11/h3-5H,6,11H2,1-2H3,(H
**InchiKey:** HRMXYTRKEOUMNG-UHFFFAOYSA-N
**Formula:** C10H14N2O3
**SMILES:** COc1ccc(CC(=O)NN)cc1OC
**Mol. weight [g/mol]:** 210.23
**CAS:** 60075-23-2

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -56.61 | kJ/mol | Joback Method |
| hf | -325.90 | kJ/mol | Joback Method |
| hfus | 29.19 | kJ/mol | Joback Method |
| hvap | 70.10 | kJ/mol | Joback Method |
| log10ws | -1.90 | | Crippen Method |
| logp | 0.236 | | Crippen Method |
| mcvol | 161.270 | ml/mol | McGowan Method |
| pc | 3163.27 | kPa | Joback Method |
| tb | 686.25 | K | Joback Method |
| tc | 905.34 | K | Joback Method |
| tf | 484.23 | K | Joback Method |
| vc | 0.594 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 428.80 | J/mol×K | 686.25 | Joback Method |
| cpg | 441.24 | J/mol×K | 722.77 | Joback Method |
| cpg | 452.89 | J/mol×K | 759.28 | Joback Method |
| cpg | 463.74 | J/mol×K | 795.80 | Joback Method |
| cpg | 473.79 | J/mol×K | 832.31 | Joback Method |
| cpg | 483.03 | J/mol×K | 868.83 | Joback Method |

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|---|---|---|---|---|
| cpg | 491.46 | J/mol×K | 905.34 | Joback Method |

# Sources

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|---|---|
| **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=C60075232&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |