# 1H-Imidazole, 4,5-dihydro-2-(phenylmethyl)-

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|---|---|
| **Other names:** | 2-Imidazoline, 2-benzyl- |
| | Artonil |
| | Benzazoline |
| | Benzidazol |
| | Benzolin |
| | Benzylimidazoline |
| | Dilatol ASI |
| | Divascol |
| | Imidalin |
| | Kasimid |
| | Lambril |
| | Olitensol |
| | Peripherine |
| | Phenylmethylimidazoline |
| | Prefaxil |
| | Priscol |
| | Priscoline |
| | Tolazolin |
| | Tolazoline |
| | Vasimid |
| | Vasodil |
| | Vasodilatan |
| | 2-Benzyl-2-imidazoline |
| | 2-Benzyl-4,5-imidazoline |
| | 2-Benzylimidazoline |
| | CIBA 3259 |
| | Imidaline |
| | 4,5-Dihydro-2-(phenylmethyl)-1H-imidazole |
| | Benzolin (vasodilator) |
| | NSC 35110 |
| **Inchi:** | InChI=1S/C10H12N2/c1-2-4-9(5-3-1)8-10-11-6-7-12-10/h1-5H,6-8H2,(H,11,12) |
| **InchiKey:** | JIVZKJJQOZQXQB-UHFFFAOYSA-N |
| **Formula:** | C10H12N2 |
| **SMILES:** | c1ccc(CC2=NCCN2)cc1 |
| **Mol. weight [g/mol]:** | 160.22 |
| **CAS:** | 59-98-3 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | 414.81 | kJ/mol | Joback Method |
| hf | 222.71 | kJ/mol | Joback Method |
| hfus | 24.12 | kJ/mol | Joback Method |
| hvap | 54.62 | kJ/mol | Joback Method |
| ie | 8.50 | eV | NIST Webbook |
| log10ws | -1.85 | | Crippen Method |
| logp | 1.231 | | Crippen Method |
| mcvol | 132.800 | ml/mol | McGowan Method |
| pc | 3970.51 | kPa | Joback Method |
| rinpol | 1471.00 | | NIST Webbook |
| rinpol | 1465.00 | | NIST Webbook |
| rinpol | 1474.00 | | NIST Webbook |
| rinpol | 1510.00 | | NIST Webbook |
| rinpol | 1477.00 | | NIST Webbook |
| rinpol | 1471.00 | | NIST Webbook |
| rinpol | 1490.00 | | NIST Webbook |
| rinpol | 1490.00 | | NIST Webbook |
| rinpol | 1510.00 | | NIST Webbook |
| rinpol | 1490.00 | | NIST Webbook |
| rinpol | 1510.00 | | NIST Webbook |
| rinpol | 1471.00 | | NIST Webbook |
| rinpol | 1477.00 | | NIST Webbook |
| tb | 581.22 | K | Joback Method |
| tc | 839.25 | K | Joback Method |
| tf | 433.87 | K | Joback Method |
| vc | 0.501 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 326.16 | J/mol×K | 581.22 | Joback Method |
| cpg | 343.65 | J/mol×K | 624.22 | Joback Method |
| cpg | 359.83 | J/mol×K | 667.23 | Joback Method |
| cpg | 374.72 | J/mol×K | 710.23 | Joback Method |
| cpg | 388.37 | J/mol×K | 753.24 | Joback Method |
| cpg | 400.83 | J/mol×K | 796.24 | Joback Method |

| | | | | |
|---|---|---|---|---|
| cpg | 412.14 | J/mol×K | 839.25 | 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=C59983&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 |
| **ie:** | Ionization energy |
| **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 |