

# 2-HYDROXYBENZIMIDAZOLE

|                      |                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other names:         | 2-Benzimidazolinone<br>2-Benzimidazolol<br>2-Benzimidazolone<br>2(3H)-Benzimidazolone<br>1,3-Dihydro-2H-benzimidazol-2-one<br>2-Hydroxybenzimidazole<br>N,N'-(1,2-Phenyleneurea)<br>o-Phenyleneurea<br>Urea, N,N'-(1,2-phenylene)-<br>Benzamidazole-2(3H)-one<br>2-Oxobenzimidazole<br>2(3H)-Oxobenzimidazole<br>2-Hydroxy-1H-benzimidazole<br>NSC 10383<br>NSC 178108 |
| Inchi:               | InChI=1S/C7H6N2O/c10-7-8-5-3-1-2-4-6(5)9-7/h1-4H,(H2,8,9,10)                                                                                                                                                                                                                                                                                                           |
| InchiKey:            | SILNNFMWIMZVEQ-UHFFFAOYSA-N                                                                                                                                                                                                                                                                                                                                            |
| Formula:             | C7H6N2O                                                                                                                                                                                                                                                                                                                                                                |
| SMILES:              | O=c1[nH]c2ccccc2[nH]1                                                                                                                                                                                                                                                                                                                                                  |
| Mol. weight [g/mol]: | 134.14                                                                                                                                                                                                                                                                                                                                                                 |

## Physical Properties

| Property code | Value           | Unit    | Source                   |
|---------------|-----------------|---------|--------------------------|
| chs           | -3527.50 ± 3.20 | kJ/mol  | NIST Webbook             |
| hf            | -39.84          | kJ/mol  | Cheméo Relay (1.0)       |
| hfs           | -85.10 ± 3.20   | kJ/mol  | NIST Webbook             |
| hsub          | 126.40 ± 2.40   | kJ/mol  | NIST Webbook             |
| ie            | 8.10            | eV      | Cheméo Relay (1.0)       |
| log10ws       | -1.83           |         | Cheméo Relay (1.0)       |
| logp          | -0.108          |         | Crippen Method           |
| mcvol         | 96.400          | ml/mol  | McGowan Method           |
| pc            | 6164.75         | kPa     | Cheméo Relay (1.0, beta) |
| tb            | 594.25          | K       | Cheméo Relay (1.0)       |
| tc            | 869.75          | K       | Cheméo Relay (1.0)       |
| tf            | 527.66          | K       | Cheméo Relay (1.0)       |
| vc            | 0.351           | m3/kmol | Cheméo Relay (1.0)       |

# Sources

|                                  |                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NIST Webbook:</b>             | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C615167&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C615167&amp;Units=SI</a> |
| <b>McGowan Method:</b>           | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>Crippen Method:</b>           | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |
| <b>Crippen Method:</b>           | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Cheméo Relay (1.0):</b>       |                                                                                                                                           |
| <b>Cheméo Relay (1.0, beta):</b> |                                                                                                                                           |

# Legend

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| <b>chs:</b>     | Standard solid enthalpy of combustion                    |
| <b>hf:</b>      | Enthalpy of formation at standard conditions             |
| <b>hfs:</b>     | Solid phase enthalpy of formation at standard conditions |
| <b>hsub:</b>    | Enthalpy of sublimation at standard conditions           |
| <b>ie:</b>      | Ionization energy                                        |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l                       |
| <b>logp:</b>    | Octanol/Water partition coefficient                      |
| <b>mcvol:</b>   | McGowan's characteristic volume                          |
| <b>pc:</b>      | Critical Pressure                                        |
| <b>tb:</b>      | Normal Boiling Point Temperature                         |
| <b>tc:</b>      | Critical Temperature                                     |
| <b>tf:</b>      | Normal melting (fusion) point                            |
| <b>vc:</b>      | Critical Volume                                          |

Latest version available from:

<https://www.chemeo.com/cid/36-355-8/2-HYDROXYBENZIMIDAZOLE.pdf>

Generated by Cheméo on 2026-07-21 20:54:54.947197722 +0000 UTC m=+178390.789083138.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.