# 5,7,3',4'-tetrahydroxyflavone

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|---|---|
| **Other names:** | 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-4-benzopyrone |
| | 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- |
| | Digitoflavone |
| | Flacitran |
| | Flavone, 3',4',5,7-tetrahydroxy- |
| | Luteolin |
| | Weld Lake |
| | luteoline |
| **Inchi:** | InChI=1S/C15H10O6/c16-8-4-11(19)15-12(20)6-13(21-14(15)5-8)7-1-2-9(17)10(18)3-7/h |
| **InchiKey:** | IQPNAANSBPBGFQ-UHFFFAOYSA-N |
| **Formula:** | C15H10O6 |
| **SMILES:** | O=c1cc(-c2ccc(O)c(O)c2)oc2cc(O)cc(O)c12 |
| **Mol. weight [g/mol]:** | 286.24 |
| **CAS:** | 491-70-3 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| log10ws | -7.23 | | Crippen Method |
| logp | 2.282 | | Crippen Method |
| mcvol | 190.450 | ml/mol | McGowan Method |
| tf | 610.53 | K | Measurement and correlation of the solubilities of luteolin and rutin in five imidazole-based ionic liquids |
| tf | 601.00 | K | Measurement and Correlation of Solubilities of Luteolin in Organic Solvents at Different Temperatures |
| tf | 610.58 | K | Solubility of Luteolin in Ethanol + Water Mixed Solvents at Different Temperatures |

# Sources

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| **Measurement and correlation of the solubilities of luteolin and rutin in five Imidazole-based ionic liquids:** | https://www.doi.org/10.1016/j.fluid.2013.01.026 |
| **Measurement and Correlation of Solubilities of Luteolin in Organic Solvents at Different Temperatures:** | https://www.doi.org/10.1021/je060133l |
| **Solubility of Luteolin in Ethanol + Water Mixed Solvents at Different Temperatures:** | https://www.doi.org/10.1021/je900381r |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C491703&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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|---|---|
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **tf:** | Normal melting (fusion) point |