# salophen

**Other names:** benzoic acid, 2-hydroxy-, 4-(acetylamino)phenyl ester
**Inchi:** InChI=1S/C15H13NO4/c1-10(17)16-11-6-8-12(9-7-11)20-15(19)13-4-2-3-5-14(13)18/h2-9
**InchiKey:** TWIIVLKQFJBFPW-UHFFFAOYSA-N
**Formula:** C15H13NO4
**SMILES:** CC(=O)Nc1ccc(OC(=O)c2ccccc2O)cc1
**Mol. weight [g/mol]:** 271.27

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hfus | 37.57 | kJ/mol | Joback Method |
| hvap | 106.62 | kJ/mol | Cheméo Relay (1.0) |
| ie | 7.59 | eV | Cheméo Relay (1.0) |
| log10ws | -3.25 | | Cheméo Relay (1.0) |
| logp | 2.570 | | Crippen Method |
| mcvol | 199.550 | ml/mol | McGowan Method |
| tb | 633.15 | K | Cheméo Relay (1.0) |
| tc | 979.91 | K | Cheméo Relay (1.0) |
| tf | 398.20 | K | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 573.98 | J/mol×K | 861.89 | Joback Method |
| cpg | 585.26 | J/mol×K | 903.10 | Joback Method |
| cpg | 595.78 | J/mol×K | 944.30 | Joback Method |
| cpg | 605.62 | J/mol×K | 985.51 | Joback Method |
| cpg | 614.92 | J/mol×K | 1026.72 | Joback Method |
| cpg | 623.77 | J/mol×K | 1067.92 | Joback Method |
| cpg | 632.28 | J/mol×K | 1109.13 | Joback Method |

# Sources

| | |
|---|---|
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Cheméo Relay (1.0):** | |
| **Cheméo Relay (1.0, beta):** | |
| **Effect of solvent on the volumetric behavior ofN,N' -salicylidenephenyl diamine (Salophen) Schiff base at differenttemperatures (288.15 - 318.15) K:** | https://www.doi.org/10.1016/j.fluid.2013.05.001 |

# Legend

| | |
|---|---|
| **cpg:** | Ideal gas heat capacity |
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |

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