# p-tert-Butylphenylsalicylate

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|---|---|
| **Other names:** | 4-tert-Butylphenyl salicylate |
| | Salicylic acid p-tert-butylphenyl ester |
| | Benzoic acid, 2-hydroxy-, 4-(1,1-dimethylethyl)phenyl ester |
| | Salicyclic acid p-tert-butylphenyl ester |
| | UV Absorber NL/3 |
| | p-terc.Butylfenylester kyseliny salicylove |
| | 4-(t-Butylphenyl) salicyclate |
| | Salicyclic acid, 4-(t-butylphenyl) ester |
| **Inchi:** | InChI=1S/C17H18O3/c1-17(2,3)12-8-10-13(11-9-12)20-16(19)14-6-4-5-7-15(14)18/h4-11 |
| **InchiKey:** | DBOSBRHMHBENLP-UHFFFAOYSA-N |
| **Formula:** | C17H18O3 |
| **SMILES:** | CC(C)(C)c1ccc(OC(=O)c2ccccc2O)cc1 |
| **Mol. weight [g/mol]:** | 270.32 |
| **CAS:** | 87-18-3 |

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -78.25 | kJ/mol | Joback Method |
| hf | -363.48 | kJ/mol | Joback Method |
| hfus | 28.64 | kJ/mol | Joback Method |
| hvap | 79.52 | kJ/mol | Joback Method |
| log10ws | -4.42 | | Crippen Method |
| logp | 3.909 | | Crippen Method |
| mcvol | 216.180 | ml/mol | McGowan Method |
| pc | 2527.73 | kPa | Joback Method |
| tb | 800.38 | K | Joback Method |
| tc | 1048.95 | K | Joback Method |
| tf | 533.01 | K | Joback Method |
| vc | 0.750 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 689.76 | J/mol×K | 1007.52 | Joback Method |

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|---|---|---|---|---|
| cpg | 700.97 | J/mol×K | 1048.95 | Joback Method |
| cpg | 624.93 | J/mol×K | 800.38 | Joback Method |
| cpg | 639.58 | J/mol×K | 841.81 | Joback Method |
| cpg | 653.24 | J/mol×K | 883.24 | Joback Method |
| cpg | 666.05 | J/mol×K | 924.67 | Joback Method |
| cpg | 678.17 | J/mol×K | 966.09 | Joback Method |
| dvisc | 0.0000052 | Pa×s | 800.38 | Joback Method |
| dvisc | 0.0000076 | Pa×s | 755.82 | Joback Method |
| dvisc | 0.0001235 | Pa×s | 533.01 | Joback Method |
| dvisc | 0.0000595 | Pa×s | 577.57 | Joback Method |
| dvisc | 0.0000318 | Pa×s | 622.13 | Joback Method |
| dvisc | 0.0000185 | Pa×s | 666.69 | Joback Method |
| dvisc | 0.0000115 | Pa×s | 711.26 | Joback Method |
| hsubt | 137.40 | kJ/mol | 314.50 | NIST Webbook |
| hvapt | 90.40 | kJ/mol | 387.00 | NIST Webbook |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C87183&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Joback Method:** https://en.wikipedia.org/wiki/Joback_method

# Legend

**cpg:** Ideal gas heat capacity
**dvisc:** Dynamic viscosity
**gf:** Standard Gibbs free energy of formation
**hf:** Enthalpy of formation at standard conditions
**hfus:** Enthalpy of fusion at standard conditions
**hsubt:** Enthalpy of sublimation at a given temperature
**hvap:** Enthalpy of vaporization at standard conditions
**hvapt:** Enthalpy of vaporization at a given temperature
**log10ws:** Log10 of Water solubility in mol/l
**logp:** Octanol/Water partition coefficient
**mcvol:** McGowan's characteristic volume
**pc:** Critical Pressure

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|---|---|
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |