# Dibutyl hydrogen phosphite

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|---|---|
| **Other names:** | Dibutyl phosphite |
| | dibutyl phosphonate |
| **Inchi:** | InChI=1S/C8H19O3P/c1-3-5-7-10-12(9)11-8-6-4-2/h12H,3-8H2,1-2H3 |
| **InchiKey:** | NFJPGAKRJKLOJK-UHFFFAOYSA-N |
| **Formula:** | C8H19O3P |
| **SMILES:** | CCCCO[PH](=O)OCCCC |
| **Mol. weight [g/mol]:** | 194.21 |
| **CAS:** | 1809-19-4 |

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| log10ws | -3.81 | | Crippen Method |
| logp | 3.010 | | Crippen Method |
| mcvol | 161.650 | ml/mol | McGowan Method |
| tb | 546.08 | K | Correlation of normal boiling points of dialkylalkyl phosphonates with topological indices on the gas chromatographic retention data |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| hvapt | 37.80 | kJ/mol | 368.00 | NIST Webbook |

## Sources

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|---|---|
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Correlation of normal boiling points of dialkylalkyl phosphonates with topological indices on the gas chromatographic retention data:** | https://www.doi.org/10.1016/j.tca.2014.11.027 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C1809194&Units=SI |

# Legend

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|---|---|
| **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 |
| **tb:** | Normal Boiling Point Temperature |