# Phosphoric acid, phenyl-diethyl ester

**Other names:** Diethyl phenyl phosphate
**Inchi:** InChI=1S/C10H15O4P/c1-3-12-15(11,13-4-2)14-10-8-6-5-7-9-10/h5-9H,3-4H2,1-2H3
**InchiKey:** DHTQKXHLXVUBCF-UHFFFAOYSA-N
**Formula:** C10H15O4P
**SMILES:** CCOP(=O)(OCC)Oc1ccccc1
**Mol. weight [g/mol]:** 230.20

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| af | 0.5686 | | Cheméo Relay (1.0) |
| hf | -673.11 | kJ/mol | Cheméo Relay (1.0) |
| hvap | 77.04 | kJ/mol | Cheméo Relay (1.0) |
| ie | 8.86 | eV | Cheméo Relay (1.0) |
| log10ws | -1.63 | | Cheméo Relay (1.0) |
| logp | 3.247 | | Crippen Method |
| mcvol | 171.940 | ml/mol | McGowan Method |
| pc | 2241.41 | kPa | Cheméo Relay (1.0, beta) |
| rinpol | 1502.00 | | NIST Webbook |
| rinpol | 1502.00 | | NIST Webbook |
| ripol | 2210.00 | | NIST Webbook |
| ripol | 2210.00 | | NIST Webbook |
| tb | 558.66 | K | Cheméo Relay (1.0) |
| tc | 734.93 | K | Cheméo Relay (1.0) |
| tf | 249.00 | K | Cheméo Relay (1.0) |

## Sources

**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Cheméo Relay (1.0):**
**Cheméo Relay (1.0, beta):**
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C2510863&Units=SI
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# Legend

| | |
|---|---|
| **af:** | Acentric Factor |
| **hf:** | Enthalpy of formation 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 |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **ripol:** | Polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |