# Triethylphosphine

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|---|---|
| **Other names:** | Phosphine, triethyl-<br>Triethylphosphorus<br>(C2H5)3P<br>Phosphorus triethyl |
| **Inchi:** | InChI=1S/C6H15P/c1-4-7(5-2)6-3/h4-6H2,1-3H3 |
| **InchiKey:** | RXJKFRMDXUJTEX-UHFFFAOYSA-N |
| **Formula:** | C6H15P |
| **SMILES:** | CCP(CC)CC |
| **Mol. weight [g/mol]:** | 118.16 |
| **CAS:** | 554-70-1 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| affp | 984.50 | kJ/mol | NIST Webbook |
| basg | 952.00 | kJ/mol | NIST Webbook |
| ie | 8.18 ± 0.05 | eV | NIST Webbook |
| ie | 8.52 | eV | NIST Webbook |
| ie | 8.00 | eV | NIST Webbook |
| ie | 8.00 ± 0.30 | eV | NIST Webbook |
| ie | 7.60 | eV | NIST Webbook |
| ie | 8.27 ± 0.24 | eV | NIST Webbook |
| ie | 8.31 | eV | NIST Webbook |
| ie | 8.40 | eV | NIST Webbook |
| log10ws | 1.81 | | Crippen Method |
| logp | 2.528 | | Crippen Method |
| mcvol | 115.860 | ml/mol | McGowan Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| hfust | 10.73 | kJ/mol | 188.20 | NIST Webbook |
| hvapt | 38.30 | kJ/mol | 346.50 | 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 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C554701&Units=SI |

# Legend

| | |
|---|---|
| **affp:** | Proton affinity |
| **basg:** | Gas basicity |
| **hfust:** | Enthalpy of fusion at a given temperature |
| **hvapt:** | Enthalpy of vaporization at a given temperature |
| **ie:** | Ionization energy |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |