

# Demeton-O-methyl

|                             |   |
|-----------------------------|---|
| <b>Other names:</b>         | Phosphorothioic acid, O-[2-(ethylthio)ethyl] O,O-dimethyl ester<br>Methyl-O-demeton<br>O-[2-(Ethylthio)ethyl] O,O-dimethyl phosphorothioate<br>O-[2-(Ethylthio)ethyl] O,O-dimethyl thiophosphate<br>O,O-Dimethyl O-[2-(ethylthio)ethyl] phosphorothioate<br>O,O-Dimethyl O-[2-(ethylthio)ethyl] thiophosphate<br>Demeton-O-metile<br>O,O-Dimethyl-O-(2-aethylthio-aethyl)monothiophosphat<br>O,O-Dimethyl 2-ethylmercaptoethyl thiophosphate, thiono isomer<br>O,O-Dimethyl-O-(2-ethyl-thio-ethyl)-monothiofosfaat<br>O,O-Dimethyl O-ethylmercaptoethyl thiophosphate<br>O,O-Dimetil-O-(2-etiltio-etil)-monotiofosfato<br>ENT 18,862<br>Ethanol, 2-(ethylthio)-, O-ester with O,O-dimethyl phosphorothioate<br>«beta»-Ethylmercaptoethyl dimethyl thionophosphate<br>2-(Ethylthio)ethyl dimethyl phosphorothionate<br>Methyl-demeton-O<br>O-Methyldemeton<br>Thiophosphate de O,O-dimethyle et de O-2-ethylthio-ethyle<br>Metasystox thiono |
| <b>Inchi:</b>               | InChI=1S/C6H15O3PS2/c1-4-12-6-5-9-10(11,7-2)8-3/h4-6H2,1-3H3  |
| <b>InchiKey:</b>            | ZVZQKNVMDKSGGF-UHFFFAOYSA-N   |
| <b>Formula:</b>             | C6H15O3PS2  |
| <b>SMILES:</b>              | CCSCCOP(=S)(OC)OC   |
| <b>Mol. weight [g/mol]:</b> | 230.28  |
| <b>CAS:</b>                 | 867-27-6  |

## Physical Properties

| Property code | Value   | Unit   | Source         |
|---------------|---------|--------|----------------|
| hvap          | 71.00   | kJ/mol | NIST Webbook   |
| log10ws       | 2.27    |        | Crippen Method |
| logp          | 2.273   |        | Crippen Method |
| mcvol         | 166.170 | ml/mol | McGowan Method |

# Sources

|                        |   |
|------------------------|---|
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C867276&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C867276&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |

# Legend

|                            |   |
|----------------------------|---|
| <b>h<sub>vap</sub>:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log<sub>10</sub>ws:</b> | Log10 of Water solubility in mol/l              |
| <b>log<sub>p</sub>:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>              | McGowan's characteristic volume                 |

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