

Carbophenoxon sulfone

Other names:

Phosphorothioic acid, S-[[4-chlorophenyl)sulfonyl]methyl] O,O-diethyl ester
Phosphorothioic acid, S-[[p-chlorophenyl)sulfonyl]methyl] O,O-diethyl ester
Methanethiol, [(p-chlorophenyl)sulfonyl]-, S-ester with O,O-diethyl phosphorothioate
O,O-Diethyl S-(p-chlorophenylsulfonyl)methyl phosphorothioate
R 1777
S-(p-Chlorophenylsulfonyl)methyl O,O-diethyl phosphorothioate
Carbophenothion oxon sulfone
Trithion oxon sulfone
S-((4-Chlorophenyl)sulfonyl)methyl) O,O-diethyl thiophosphate
Carbophenothion O-analog sulfone

Inchi:

InChI=1S/C11H16ClO5PS2/c1-3-16-18(13,17-4-2)19-9-20(14,15)11-7-5-10(12)6-8-11/h5

InchiKey:

AQORIFUYBMSEHZ-UHFFFAOYSA-N

Formula:

C11H16ClO5PS2

SMILES:

CCOP(=O)(OCC)SCS(=O)(=O)c1ccc(Cl)cc1

Mol. weight [g/mol]:

358.80

CAS:

16662-87-6

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|--------|----------------|
| log10ws | -5.34 | | Crippen Method |
| logp | 3.986 | | Crippen Method |
| mvol | 236.840 | ml/mol | McGowan Method |

Sources

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=C16662876&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Legend

| | |
|-----------------|-------------------------------------|
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| mcvol: | McGowan's characteristic volume |

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