

# Phosphoramidic acid, phenyl-, diphenyl ester

**Other names:**

Diphenyl N-phenylphosphoramidate  
Diphenyl anilidophosphate  
Diphenyl phenylphosphoramidate  
Phenylphosphoramidic acid diphenyl ester  
Phosphoramidic acid, N-phenyl-, diphenyl ester  
diphenyl anilinophosphonate

**Inchi:**

InChI=1S/C18H16NO3P/c20-23(19-16-10-4-1-5-11-16,21-17-12-6-2-7-13-17)22-18-14-8

**InchiKey:**

FZNQHYXSPNEFAI-UHFFFAOYSA-N

**Formula:**

C18H16NO3P

**SMILES:**

O=P(Nc1ccccc1)(Oc1ccccc1)Oc1ccccc1

**Mol. weight [g/mol]:**

325.30

**CAS:**

3848-51-9

## Physical Properties

Property code	Value	Unit	Source
hfus	0.07	kJ/mol	Solid-liquid equilibrium of diphenyl anilinophosphonate in the different organic solvents
log10ws	-7.03		Crippen Method
logp	5.365		Crippen Method
mvol	241.250	ml/mol	McGowan Method

## Sources

**Solid-liquid equilibrium of diphenyl anilinophosphonate in the different organic solvents:**

<https://www.doi.org/10.1016/j.fluid.2015.03.036>

**McGowan Method:**

<http://link.springer.com/article/10.1007/BF02311772>

**NIST Webbook:**

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C3848519&Units=SI>

**Crippen Method:**

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

**Crippen Method:**

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

# Legend

<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume

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