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
mcvol	241.250	ml/mol	McGowan Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
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/ci990307l

Legend

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

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