Phenylphosphonous acid

Other names:	Benzenephosphinic acid
	Benzenephosphonous acid
	Hydroxyphenylphosphine oxide
	Phenylphosphinic acid
	Phosphinic acid, phenyl-
Inchi:	InChI=1S/C6H7O2P/c7-9(8)6-4-2-1-3-5-6/h1-5,9H,(H,7,8)
InchiKey:	MLCHBQKMVKNBOV-UHFFFAOYSA-N
Formula:	C6H7O2P
SMILES:	O=[PH](O)c1ccccc1
Mol. weight [g/mol]:	142.09
CAS:	1779-48-2

Physical Properties

Property code	Value	Unit	Source
hfus	12.80	kJ/mol	Solubilities of Phenylphosphinic Acid, Methylphenylphosphinic Acid, Hexachlorocyclotriphosphazene, and Hexaphenoxycyclotriphosphazene in Selected Solvents
log10ws	-6.56		Crippen Method
logp	0.779		Crippen Method
mcvol	103.840	ml/mol	McGowan Method

Sources

Solubility of Phenylphosphinic Acid in Supercritical Carbon Dioxide and the Influence of Methanol on the Solubility Behavior	https://www.doi.org/10.1021/acs.jced.9b00732
Solubilities of Phenylphosphinic Acid, Hydroxymethylphenylphosphinic Acid, p-Methoxyphenylphosphinic Acid, Methylphenylphosphinic Acid, p-Methoxyphenylhydroxymethylphosphinic Acid, Triphenylphosphine, Hexachlorocyclotriphosphazene, and Hexaphenoxycyclotriphosphazene in Selected Solvents	https://www.doi.org/10.1021/je050377q
Solubilities of Phenylphosphinic Acid, Methylphenylphosphinic Acid, Hexachlorocyclotriphosphazene, and Hexaphenoxycyclotriphosphazene in Selected Solvents	https://www.doi.org/10.1021/je1009812
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1779482&Units=SI
Tris(p-methoxyphenyl)phosphine Oxide in Selected Solvents:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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