

Phosphine, methyl-

Other names:	Methylphosphine CH ₃ PH ₂
Inchi:	InChI=1S/CH ₅ P/c1-2/h2H ₂ ,1H ₃
InchiKey:	SAWKFRBJGLMMES-UHFFFAOYSA-N
Formula:	CH ₅ P
SMILES:	CP
Mol. weight [g/mol]:	48.02
CAS:	593-54-4

Physical Properties

Property code	Value	Unit	Source
affp	851.50	kJ/mol	NIST Webbook
basg	817.60	kJ/mol	NIST Webbook
ie	9.12 ± 0.07	eV	NIST Webbook
ie	9.72 ± 0.15	eV	NIST Webbook
ie	9.62	eV	NIST Webbook
ie	9.12	eV	NIST Webbook
ie	9.70	eV	NIST Webbook
ie	9.60 ± 0.10	eV	NIST Webbook
log10ws	3.53		Crippen Method
logp	0.491		Crippen Method
mcvol	45.410	ml/mol	McGowan Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C593544&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

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