

# Phosphorus monofluoride

**Inchi:** InChI=1S/FP/c1-2  
**InchiKey:** QUQSORXWLOUIIW-UHFFFAOYSA-N  
**Formula:** FP  
**SMILES:** F[P]  
**Mol. weight [g/mol]:** 49.97  
**CAS:** 16027-92-2

## Physical Properties

Property code	Value	Unit	Source
ie	9.60 ± 0.01	eV	NIST Webbook
ie	11.40 ± 0.60	eV	NIST Webbook
ie	9.74 ± 0.01	eV	NIST Webbook
log10ws	2.59		Crippen Method
logp	1.281		Crippen Method
mcvol	28.790	ml/mol	McGowan Method

## Sources

**McGowan Method:** <http://link.springer.com/article/10.1007/BF02311772>  
**NIST Webbook:** <http://webbook.nist.gov/cgi/cbook.cgi?ID=C16027922&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

**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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