

# Phosphorus difluoride

**Inchi:** InChI=1S/F2P/c1-3-2  
**InchiKey:** MSGYRGHIEBLFLX-UHFFFAOYSA-N  
**Formula:** F2P  
**SMILES:** F[P]F  
**Mol. weight [g/mol]:** 68.97  
**CAS:** 13873-52-4

## Physical Properties

Property code	Value	Unit	Source
ea	1.60 ± 0.50	eV	NIST Webbook
ea	1.50 ± 0.50	eV	NIST Webbook
ea	1.60 ± 0.50	eV	NIST Webbook
ie	8.84 ± 0.01	eV	NIST Webbook
ie	8.85 ± 0.01	eV	NIST Webbook
ie	9.80	eV	NIST Webbook
ie	9.09 ± 0.01	eV	NIST Webbook
log10ws	2.19		Crippen Method
logp	1.702		Crippen Method
mcvol	32.710	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](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=C13873524&Units=SI>

## Legend

**ea:** Electron affinity  
**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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