Phosphorus dioxide

Inchi: InChI=1S/HO2P/c1-3-2/h3H
InchiKey: CJDZTJNITSFKRE-UHFFFAOYSA-N
Formula: O2P
SMILES: O=[PH]=O
Mol. weight [g/mol]: 62.97
CAS: 12164-97-5

Physical Properties

Property code	Value	Unit	Source
ea	3.42 ± 0.01	eV	NIST Webbook
ea	3.80 ± 0.22	eV	NIST Webbook
ea	3.30 ± 0.20	eV	NIST Webbook
ea	3.00	eV	NIST Webbook
ie	11.90 ± 0.50	eV	NIST Webbook
ie	10.50 ± 0.10	eV	NIST Webbook
ie	11.50 ± 0.50	eV	NIST Webbook
ie	11.00 ± 1.00	eV	NIST Webbook
log10ws	-5.63		Crippen Method
logp	0.356		Crippen Method
mcvol	38.760	ml/mol	McGowan Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C12164975&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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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