Phosphorus mononitride

Inchi: InChI=1S/NP/c1-2
InchiKey: AOPJVJYWEDDOBI-UHFFFAOYSA-N
Formula: NP
SMILES: N#P
Mol. weight [g/mol]: 44.98
CAS: 17739-47-8

Physical Properties

Property code	Value	Unit	Source
affp	789.40	kJ/mol	NIST Webbook
basg	757.00	kJ/mol	NIST Webbook
ie	11.85	eV	NIST Webbook
ie	11.80 ± 0.10	eV	NIST Webbook
ie	11.88 ± 0.01	eV	NIST Webbook
ie	11.88 ± 0.01	eV	NIST Webbook
log10ws	2.97		Crippen Method
logp	0.876		Crippen Method
mcvol	32.700	ml/mol	McGowan Method

Sources

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=C17739478&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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