

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
mccvol	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

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