

# Hexametapil

<b>Other names:</b>	Phosphorous triamide, hexamethyl- Hexamethylphosphorous triamide HMPT Phosphine, tris(dimethylamino)- Tris(dimethylamino)phosphine $((\text{CH}_3)_2\text{N})_3\text{P}$ Hexamethylphosphorus triamide Hexamethyltriaminophosphine Hexamethyltriamidophosphite NSC 102707 Phosphorous triamide, N,N,N',N',N'',N''-hexamethyl-
<b>Inchi:</b>	InChI=1S/C6H18N3P/c1-7(2)10(8(3)4)9(5)6/h1-6H3
<b>InchiKey:</b>	XVDBWWRIXBMVJV-UHFFFAOYSA-N
<b>Formula:</b>	C6H18N3P
<b>SMILES:</b>	CN(C)P(N(C)C)N(C)C
<b>Mol. weight [g/mol]:</b>	163.20
<b>CAS:</b>	1608-26-0

## Physical Properties

Property code	Value	Unit	Source
affp	930.10	kJ/mol	NIST Webbook
basg	897.70	kJ/mol	NIST Webbook
hvap	41.50 ± 0.60	kJ/mol	NIST Webbook
ie	6.75	eV	NIST Webbook
ie	10.01	eV	NIST Webbook
ie	6.70	eV	NIST Webbook
ie	7.59	eV	NIST Webbook
ie	7.89 ± 0.10	eV	NIST Webbook
ie	7.30	eV	NIST Webbook
ie	7.61	eV	NIST Webbook
ie	7.61	eV	NIST Webbook
log10ws	3.13		Crippen Method
logp	0.898		Crippen Method
mvol	145.800	ml/mol	McGowan Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	63.20	kJ/mol	315.50	NIST Webbook

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C1608260&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1608260&amp;Units=SI</a>

## Legend

<b>affp:</b>	Proton affinity
<b>basg:</b>	Gas basicity
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>hvapt:</b>	Enthalpy of vaporization at a given temperature
<b>ie:</b>	Ionization energy
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume

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