Phosphine, trimethyl-

Other names: Phosphine, trimethyl-
Trimethylphosphorus
(CH3)3P
Inchi: InChI=1S/C3H9P/c1-4(2)3/h1-3H3
InchiKey: YWWDBCBWQNCYNR-UHFFFAOYSA-N
Formula: C3H9P
SMILES: CP(C)C
Mol. weight [g/mol]: 76.08

Physical Properties

Property code	Value	Unit	Source
affp	958.80	kJ/mol	NIST Webbook
basg	926.30	kJ/mol	NIST Webbook
ie	8.60	eV	NIST Webbook
ie	8.62	eV	NIST Webbook
ie	8.79	eV	NIST Webbook
ie	8.01 ± 0.07	eV	NIST Webbook
ie	8.60 ± 0.20	eV	NIST Webbook
ie	9.20 ± 0.50	eV	NIST Webbook
ie	8.62 ± 0.05	eV	NIST Webbook
ie	8.60	eV	NIST Webbook
ie	8.11	eV	NIST Webbook
ie	8.10 ± 0.10	eV	NIST Webbook
ie	8.60	eV	NIST Webbook
ie	8.60	eV	NIST Webbook
ie	8.65	eV	NIST Webbook
ie	8.60	eV	NIST Webbook
ie	8.60	eV	NIST Webbook
ie	8.60 ± 0.10	eV	NIST Webbook
ie	8.12	eV	NIST Webbook
logp	1.358		Crippen Method
mcvol	73.590	ml/mol	McGowan Method
tf	231.32	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	28.90	kJ/mol	279.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C594092&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
tf:	Normal melting (fusion) point