Phosphine, tris(trifluoromethyl)-

Other names: Tris(trifluoromethyl)phosphine
Inchi: InChI=1S/C3F9P/c4-1(5,6)13(2(7,8)9)3(10,11)12
InchiKey: MXLDRFIVBLWESA-UHFFFAOYSA-N
Formula: C3F9P
SMILES: FC(F)(F)P(C(F)(F)F)C(F)(F)F
Mol. weight [g/mol]: 237.99
CAS: 432-04-2

Physical Properties

Property code	Value	Unit	Source
ie	11.70	eV	NIST Webbook
ie	11.70	eV	NIST Webbook
ie	11.10	eV	NIST Webbook
ie	11.30 ± 0.10	eV	NIST Webbook
ie	11.57	eV	NIST Webbook
ie	11.70	eV	NIST Webbook
log10ws	-0.41		Crippen Method
logp	4.028		Crippen Method
mcvol	89.520	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	24.70	kJ/mol	266.50	NIST Webbook

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C432042&Units=SI

Legend

hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume