

1,2,3,4Tetra-kis(trifluoromethyl)cyclotetraphosphine

Other names:	Tetraphosphetane,tetrakis(trifluoromethyl)- 1,2,3,4Tetra-kis(trifluoromethyl)cyclotetraphosphine
Inchi:	InChI=1S/C4F12P4/c5-1(6,7)17-18(2(8,9)10)20(4(14,15)16)19(17)3(11,12)13
InchiKey:	TVVWWIPMQJSXJS-UHFFFAOYSA-N
Formula:	C4F12P4
SMILES:	FC(F)(F)P1P(C(F)(F)F)P(C(F)(F)F)P1C(F)(F)F
Mol. weight [g/mol]:	399.92

Physical Properties

Property code	Value	Unit	Source
ie	9.50	eV	NIST Webbook
ie	10.12	eV	NIST Webbook
ie	10.18	eV	NIST Webbook
ie	10.18	eV	NIST Webbook
logp	7.667		Crippen Method
mcvol	159.440	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	65.30	kJ/mol	315.50	NIST Webbook
hvapt	43.20	kJ/mol	344.00	NIST Webbook

Sources

Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C393022&Units=SI
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	

Legend

hsubt:	Enthalpy of sublimation at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

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