Diethyl phosphite

Other names:	Phosphonic acid, diethyl ester
	Diethyl acid phosphite
	Diethyl hydrogen phosphite
	Diethyl phosphonate
	Hydrogen diethyl phosphite
	O,O-Diethyl phosphonate
	OPH(OC2H5)2
	Diethoxyphosphine oxide
	Ethyl phosphonate ((EtO)2HPO)
	Phosphorous acid, diethyl ester
	NSC 2665
Inchi:	InChI=1S/C4H11O3P/c1-3-6-8(5)7-4-2/h8H,3-4H2,1-2H3
InchiKey:	MJUJXFBTEFXVKU-UHFFFAOYSA-N
Formula:	C4H11O3P
SMILES:	CCO[PH](=O)OCC
Mol. weight [g/mol]:	138.10
CAS:	762-04-9

Physical Properties

Property code	Value	Unit	Source
hvap	49.30	kJ/mol	NIST Webbook
ie	10.31	eV	NIST Webbook
ie	10.31	eV	NIST Webbook
log10ws	-2.13		Crippen Method
logp	1.449		Crippen Method
mcvol	105.290	ml/mol	McGowan Method
rinpol	953.00		NIST Webbook
rinpol	953.00		NIST Webbook
rinpol	953.00		NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	38.10	kJ/mol	404.50	NIST Webbook

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=C762049&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

hvap:	Enthalpy of vaporization at standard conditions
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
rinpol:	Non-polar retention indices