Phosphonothioic difluoride

Other names:	Phosphine sulfide, difluoro- Hydrothiophosphoryl difluoride
Inchi:	InChI=1S/F2HPS/c1-3(2)4/h3H
InchiKey:	MVVUNUURHWXOFX-UHFFFAOYSA-N
Formula:	F2HPS
SMILES:	F[PH](F)=S
Mol. weight [g/mol]:	102.04
CAS:	13780-63-7

Physical Properties

Property code	Value	Unit	Source
log10ws	3.02		Crippen Method
logp	1.431		Crippen Method
mcvol	51.210	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	29.10	kJ/mol	223.00	NIST Webbook
hvapt	29.10	kJ/mol	223.00	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=C13780637&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

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

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