

Difluorophosphoric acid

Other names:	Fluophosphoric acid (F2(HO)PO) Phosphorodifluoridic acid UN 1768
Inchi:	InChI=1S/F2HO2P/c1-5(2,3)4/h(H,3,4)
InchiKey:	DGTVXEHQMSJRPE-UHFFFAOYSA-N
Formula:	F2HO2P
SMILES:	O=P(O)(F)F
Mol. weight [g/mol]:	101.98
CAS:	13779-41-4

Physical Properties

Property code	Value	Unit	Source
log10ws	-2.06		Crippen Method
logp	1.026		Crippen Method
mcvol	46.600	ml/mol	McGowan Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.34936e+01
Coeff. B	-3.09214e+03
Coeff. C	-4.11500e+01
Temperature range (K), min.	278.00
Temperature range (K), max.	425.00

Sources

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

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=C13779414&Units=SI>
The Yaws Handbook of Vapor Pressure: <https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

Legend

log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pvap: Vapor pressure

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