

phosphorous acid

Other names: H3PO3
Inchi: InChI=1S/H3O3P/c1-4(2)3/h1-3H
InchiKey: OJMIONKXNSYLSR-UHFFFAOYSA-N
Formula: H3O3P
SMILES: OP(O)O
Mol. weight [g/mol]: 82.00
CAS: 10294-56-1

Physical Properties

Property code	Value	Unit	Source
affp	821.30	kJ/mol	NIST Webbook
basg	788.80	kJ/mol	NIST Webbook
log10ws	3.56		Crippen Method
logp	-0.810		Crippen Method
mcvol	48.930	ml/mol	McGowan Method

Sources

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci990307l>
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
KDB: <https://www.cheric.org/files/research/kdb/mol/mol1919.mol>
McGowan Method: <http://link.springer.com/article/10.1007/BF02311772>
NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C10294561&Units=SI>

Legend

affp: Proton affinity
basg: Gas basicity
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume

Latest version available from:

<https://www.chemeo.com/cid/31-157-3/phosphorous-acid.pdf>

Generated by Cheméo on 2025-12-22 22:26:51.879157298 +0000 UTC m=+6190609.409197963.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.