

$\text{H}_3\text{Na}_3[\text{PO}_4]_2\text{Te}[\text{OH}]_6$	<i>hP40</i>	(182) $P6_322 - i^2hf^2b$
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$\text{Na}_3\text{Te}(\text{HPO}_4)(\text{H}_2\text{PO}_4)(\text{OH})_6$ [1]

Structural features: Single $\text{P}(\text{O},\text{OH})_4$ tetrahedra and $\text{Te}(\text{OH})_6$ octahedra; Na in distorted octahedral voids.

Averbuch Pouchot M.T. (1980) [1]

$\text{H}_6\text{Na}_3\text{O}_{14}\text{P}_2\text{Te}$

$a = 0.7883$, $c = 1.0863$ nm, $c/a = 1.378$, $V = 0.5846$ nm³, $Z = 2$

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12 <i>i</i>	1	0.1401	0.4932	0.0759		single atom P
(OH)2	12 <i>i</i>	1	0.209	0.1964	0.1518		single atom Te
Na3	6 <i>h</i>	..2	0.5291	0.0583	$\frac{1}{4}$		octahedron $\text{O}_4(\text{OH})_2$
P4	4 <i>f</i>	3..	$\frac{1}{3}$	$\frac{2}{3}$	0.02169		tetrahedron O_4
O5	4 <i>f</i>	3..	$\frac{1}{3}$	$\frac{2}{3}$	0.6167		single atom P
Te6	2 <i>b</i>	3.2	0	0	$\frac{1}{4}$		octahedron $(\text{OH})_6$

Experimental: single crystal, diffractometer, X-rays, $R = 0.020$

Remarks: H belonging to PO_4 was not located. Hydrogen atoms are not taken into consideration for Pearson symbol, Wyckoff sequence and atomic environments.

References: [1] Averbuch Pouchot M.T. (1980), Acta Crystallogr. B 36, 2405-2406.