

Molecular Origami of PO4³⁻-
given information

ElementNames	[(P) (O) (O) (O) (O)]	
distance	153.683	P ¹ -O ¹
distance	153.725	P ¹ -O ⁴
distance	154.125	P ¹ -O ³
distance	154.371	P ¹ -O ²
angle	107.905	O ³ -P ¹ -O ²
	249.4	O ³ -O ²
angle	108.568	O ⁴ -P ¹ -O ¹
	249.6	O ⁴ -O ¹
angle	109.687	O ⁴ -P ¹ -O ²
	251.9	O ⁴ -O ²
angle	110.009	O ² -P ¹ -O ¹
	252.4	O ² -O ¹
angle	110.082	O ⁴ -P ¹ -O ³
	252.3	O ⁴ -O ³
angle	110.585	O ³ -P ¹ -O ¹
	253.	O ³ -O ¹
dopage	T	
AutoAlign	F	

structure type: XABCD

!P1
O1
O2
O3
O4
PO4³⁻

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scale 250,000,000 : 1
units: pm
offsetx 0.22 offsety 1.72
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The ORTEP diagram illustrates the crystal structure of 250M:1 PO_4^{3-} . The structure is shown as a series of repeating units along the c-axis. The central phosphorus atom (P) is coordinated by four oxygen atoms (O) in a tetrahedral arrangement. The bond lengths are labeled as follows: P—O (top) = 1.54 Å, P—O (bottom) = 1.54 Å, P—O (left) = 1.54 Å, and P—O (right) = 1.54 Å. The bond angles are labeled as follows: O—P—O (top) = 109.7°, O—P—O (bottom) = 109.7°, O—P—O (left) = 109.7°, and O—P—O (right) = 109.7°. The structure is shown as a series of repeating units along the c-axis, with the central phosphorus atom (P) and oxygen atoms (O) labeled. The bond lengths and angles are provided for the central unit.

actual size: 171 535

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