$Al[PO_4]$	*hP*72	(184) *P*6*cc* – d^6

$AlPO_4$ form 5 [1], zeolite AFI
Structural features: AlO_4 and PO_4 tetrahedra share vertices to form an AFI-type zeolite framework with channels delimited by 12-rings parallel to [001].

Klap G.J. et al. (2000) [1]
AlO_4P
a = 1.3718, c = 0.84526 nm, c/a = 0.616, V = 1.3775 nm^3, Z = 12

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12*d*	1	0.1224	0.4519	0.2982		non-colinear PAl
P2	12*d*	1	0.12298	0.4525	0.12746		tetrahedron O_4
O3	12*d*	1	0.1538	0.5737	0.0602		non-colinear PAl
O4	12*d*	1	0.3629	0.0019	0.0649		non-colinear AlP
O5	12*d*	1	0.42	0.2069	0.071		non-colinear PAl
Al6	12*d*	1	0.45652	0.12053	0.0		tetrahedron O_4

Transformation from published data: origin shift 0 0 0.9264
Experimental: single crystal, diffractometer, X-rays, synchrotron, R = 0.081, T = 293 K

Remarks: Average structure; the authors state that true symmetry may be (168) P6. The structure was also refined in the same space group (184) *P*6*cc* considering a 3-fold disorder of microdomains. The silica analogue SiO_2 SSZ-24 was refined in space group (192) *P*6/*mcc* [2].

References: [1] Klap G.J., Van Koningsveld H., Graafsma H., Schreurs A.M.M. (2000), Microporous Mesoporous Mater. 38, 403-412. [2] Bialek R., Meier W.M., Davis M., Annen M.J. (1991), Zeolites 11, 438-442.