$NaTi_2P_3S_{12}$	*hP*188	(184) *P6cc* – $d^{15}ba^2$

$NaTi_2(PS_4)_3$ [1]
Structural features: PS_4 tetrahedra and TiS_6 octahedra share edges to form a 3D-framework; part of Na in large channels parallel to [001] (partial disorder).

Cieren X. et al. (1996) [1]
$NaP_3S_{12}Ti_2$
a = 1.9906, c = 1.1552 nm, c/a = 0.580, V = 3.9642 nm^3, Z = 8

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Na1	12*d*	1	0.019	0.083	0.041	0.1	
Na2	12*d*	1	0.021	0.508	0.252	0.13	
S3	12*d*	1	0.0336	0.2459	0.3175		non-colinear PTi
Ti4	12*d*	1	0.0453	0.346	0.4476		octahedron S_6
Na5	12*d*	1	0.06	0.51	0.213	0.25	
S6	12*d*	1	0.0659	0.36	0.0783		non-colinear PTi
Na7	12*d*	1	0.088	0.038	0.143	0.09	
S8	12*d*	1	0.1727	0.4167	0.3672		non-colinear PTi
P9	12*d*	1	0.1835	0.5131	0.4472		tetrahedron S_4
S10	12*d*	1	0.2201	0.6016	0.3333		non-colinear PTi
P11	12*d*	1	0.3018	0.0112	0.2008		tetrahedron S_4
S12	12*d*	1	0.3112	0.1004	0.1071		non-colinear PTi
S13	12*d*	1	0.3949	0.0423	0.3056		single atom P
S14	12*d*	1	0.4775	0.0752	0.0072		single atom P
S15	12*d*	1	0.5534	0.2634	0.0773		non-colinear PTi
Ti16	4*b*	3..	$^1/_3$	$^2/_3$	0.457		octahedron S_6
Na17	2*a*	6..	0	0	0.0	0.35	
Na18	2*a*	6..	0	0	0.047	0.23	

Transformation from published data: -*x*,-*y*,-*z*; origin shift 0 0 0.543
Experimental: single crystal, diffractometer, X-rays, wR = 0.051

Remarks: Short interatomic distances for partly occupied site(s).

References: [1] Cieren X., Angenault J., Couturier J.C., Jaulmes S., Quarton M., Robert F. (1996), J. Solid State Chem. 121, 230-235.