$[NH_4]_{0.5}Mo_3O_9$	*hP*28	(176) $P6_3/m$ – h^4e

$NH_4Mo_6O_{18}$ [1], HMB (hexagonal molybdenum bronze)
Structural features: Double infinite chains of edge-linked MoO_6 octahedra share vertices to form a 3D-framework; NH_4 in channels parallel to [001] (partial disorder).

Jiang C.C. et al. (1999) [1]
$H_2Mo_3N_{0.50}O_9$
a = 1.0576, c = 0.3728 nm, c/a = 0.352, V = 0.3611 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	6*h*	*m*..	0.0091	0.2743	$^1/_4$		single atom Mo
Mo2	6*h*	*m*..	0.1046	0.4593	$^1/_4$		octahedron O_6
O3	6*h*	*m*..	0.2828	0.4989	$^1/_4$		single atom Mo
O4	6*h*	*m*..	0.5797	0.0792	$^1/_4$		non-colinear Mo_2
$(NH_4)5$	4*e*	3..	0	0	0.105	0.25	

Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.034, T = 296 K

Remarks: We assigned an approximate value to the occupancy of site $(NH_4)5$ based on the nominal composition. Short interatomic distances for partly occupied site(s). Hydrogen atoms are not taken into consideration for Pearson symbol, Wyckoff sequence and atomic environments.

References: [1] Jiang C.C., Liu G., Wei Y.G., Wang W., Zhang S.W. (1999), Inorg. Chem. Commun. 2, 258-260.