$CdTh[MoO_4]_3$	*hP*34	(176) $P6_3/m$ – ih^3cb

$CdTh(MoO_4)_3$ [1]
Structural features: ThO_6O_3 tricapped trigonal prisms, CdO_6 octahedra (infinite columns of face-linked octahedra) and MoO_4 tetrahedra share atoms to form a 3D-framework. Filled-up derivative of ht-$Yb(ReO_4)_3$.

Launay S., Rimsky A. (1980) [1]
$CdMo_3O_{12}Th$
$a = 0.9803$, $c = 0.635$ nm, $c/a = 0.648$, $V = 0.5285$ nm^3, $Z = 2$

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
O1	12*i*	1	0.465	0.2159	0.0282		single atom Mo
O2	6*h*	*m*..	0.0478	0.4879	$^1/_4$		single atom Mo
O3	6*h*	*m*..	0.1818	0.0185	$^1/_4$		single atom Mo
Mo4	6*h*	*m*..	0.3883	0.0982	$^1/_4$		tetrahedron O_4
Th5	2*c*	-6..	$^1/_3$	$^2/_3$	$^1/_4$		tricapped trigonal prism O_9
Cd6	2*b*	-3..	0	0	0		octahedron O_6

Transformation from published data: *y*,*x*,-*z*
Experimental: single crystal, diffractometer, X-rays, R = 0.040

References: [1] Launay S., Rimsky A. (1980), Acta Crystallogr. B 36, 910-912.