$H_{0.5}La_{6.17}[VO_4]_3Cl_{10}$	*hP*70	(176) $P6_3/m$ – ih^{9}da

$La_{12.33}V_6O_{23}(OH)Cl_{20}$ [1]
Structural features: Infinite columns of base-linked $La(Cl_4O_2)Cl_3$ and $La(Cl_2O_4)Cl_3$ tricapped trigonal prisms and VO_4 tetrahedra (statistical occupation of two face-sharing tetrahedra) share atoms to form a 3D-framework; additional La in channels parallel to [001] (partial disorder).

Kämmerer H., Gruehn R. (1998) [1]
$Cl_{10}H_{0.50}La_{6.17}O_{12}V_3$
a = 1.78729, c = 0.40545 nm, c/a = 0.227, V = 1.1217 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
V1	12*i*	1	0.18818	0.46752	0.1819	0.5	
Cl2	6*h*	*m*..	0.00543	0.58122	$^1/_4$		pentagonal bipyramid La_4O_3
Cl3	6*h*	*m*..	0.08267	0.17591	$^1/_4$		single atom La
M4	6*h*	*m*..	0.1104	0.3609	$^1/_4$		
M5	6*h*	*m*..	0.1593	0.5429	$^1/_4$		
La6	6*h*	*m*..	0.28247	0.22919	$^1/_4$		non-colinear O_2
M7	6*h*	*m*..	0.2916	0.4948	$^1/_4$		
Cl8	6*h*	*m*..	0.32492	0.08575	$^1/_4$		trigonal bipyramid La_3O_2
M9	6*h*	*m*..	0.4671	0.2797	$^1/_4$		non-colinear V_2
La10	6*h*	*m*..	0.53208	0.14757	$^1/_4$		non-coplanar square O_4
Cl11	2*d*	-6..	$^2/_3$	$^1/_3$	$^1/_4$		coplanar triangle La_3
La12	2*a*	-6..	0	0	$^1/_4$	0.167	colinear La_2

M4 = 0.958O + 0.042OH; M5 = 0.958O + 0.042OH; M7 = 0.958O + 0.042OH; M9 = 0.958O + 0.042OH
Transformation from published data: *y*,*x*,-*z*; origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.035

Remarks: 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] Kämmerer H., Gruehn R. (1998), Z. Anorg. Allg. Chem. 624, 1526-1532.