

$\text{LaCl}_3[\text{H}_2\text{O}]_3$

$hP7$

(189)  $P\text{-}62m - \text{gfa}$

**$\text{LaCl}_3 \cdot 3\text{H}_2\text{O}$  [1]**

Structural features: Infinite columns of base-linked  $\text{LaCl}_6(\text{OH}_2)_3$  tricapped trigonal prisms.

Reuter G., Frenzen G. (1994) [1]

$\text{Cl}_3\text{H}_6\text{LaO}_3$

$a = 0.6878$ ,  $c = 0.4417$  nm,  $c/a = 0.642$ ,  $V = 0.1810$  nm<sup>3</sup>,  $Z = 1$

site	Wyck.	sym.	$x$	$y$	$z$	occ.	atomic environment
Cl1	3g	$m2m$	0.291	0	$\frac{1}{2}$		10-vertex polyhedron $\text{La}_2(\text{OH}_2)_6\text{Cl}_2$
(OH <sub>2</sub> )2	3f	$m2m$	0.635	0	0		single atom La
La3	1a	$-62m$	0	0	0		tricapped trigonal prism $(\text{OH}_2)_3\text{Cl}_6$

Transformation from published data:  $-x, -y, -z$

Experimental: single crystal, diffractometer, X-rays,  $R = 0.022$ ,  $T = 293$  K

Remarks: Hydrogen atoms are not taken into consideration for Pearson symbol, Wyckoff sequence and atomic environments.

References: [1] Reuter G., Frenzen G. (1994), Acta Crystallogr. C 50, 844-845.