$Na_{0.5}NdCl_3$	*hP*10	(176) $P6_3/m$ – hca

$NaNd_2Cl_6$ [1]; $Na_{0.9}(Ca_{0.9}R_{1.1})F_6$ [2], gagarinite-(Y)
Structural features: Infinite columns of base-linked $NdCl_6Cl_3$ tricapped trigonal prisms share atoms to form a 3D-framework; Na in channels of hexagonal cross-section parallel to [001] (partial disorder). Filled-up derivative of UCl_3.

Schleid T., Meyer G. (1987) [1]
$Cl_3Na_{0.50}Nd$
a = 0.7626, c = 0.4388 nm, c/a = 0.575, V = 0.2210 nm^3, Z = 2

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Cl1	6*h*	*m*..	0.3864	0.0821	$^1/_4$		single atom Na
Nd2	2*c*	-6..	$^1/_3$	$^2/_3$	$^1/_4$		tricapped trigonal prism Cl_9
Na3	2*a*	-6..	0	0	$^1/_4$	0.5	trigonal bipyramid Na_2Cl_3

Transformation from published data: *y*,*x*,-*z*
Experimental: single crystal, diffractometer, X-rays, wR = 0.060

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

References: [1] Schleid T., Meyer G. (1987), Inorg. Chim. Acta 140, 113-116. [2] Hughes J.M., Drexler J.W. (1994), Can. Mineral. 32, 563-565.