

UCl ₃	<i>hP</i> 8	(176) <i>P</i> 6 ₃ / <i>m</i> – <i>hc</i>
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UCl₃ [2]
 Structural features: Infinite columns of base-linked UCl₆Cl₃ tricapped trigonal prisms share atoms to form a 3D-framework with channels of hexagonal cross-section parallel to [001]. See Fig. IV.49.

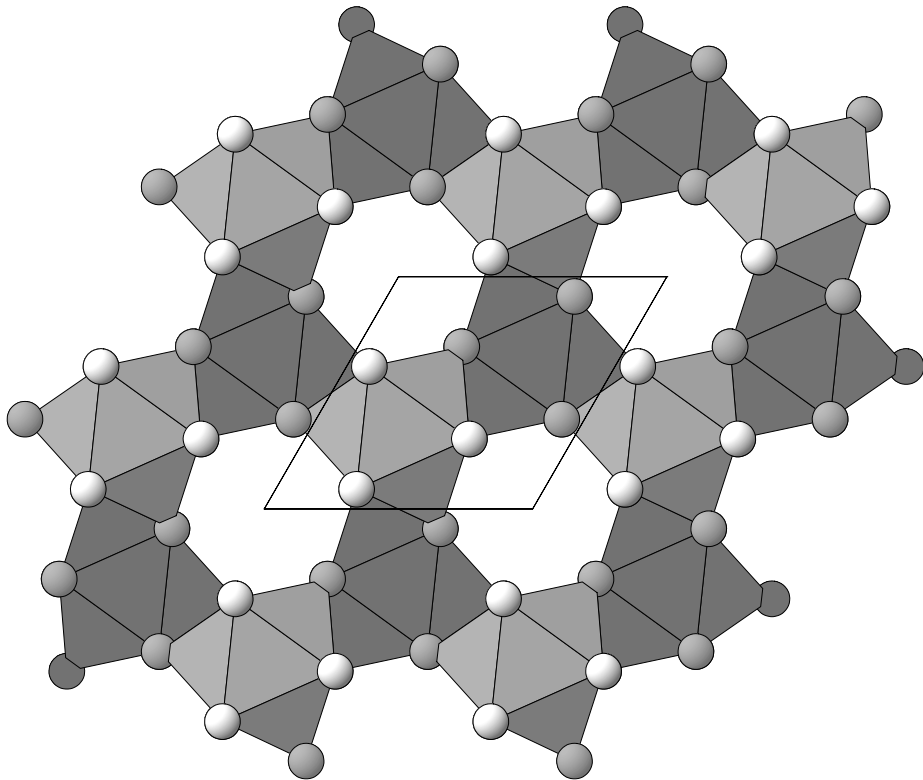


Fig. IV.49. **UCl₃**
 Arrangement of UCl₆Cl₃ tricapped trigonal prisms viewed along [001]. Light and dark prisms are shifted by *c*/2.

Schleid T. et al. (1987) [1]
 Cl₃U
a = 0.74439, *c* = 0.43243 nm, *c/a* = 0.581, *V* = 0.2075 nm³, *Z* = 2

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
Cl1	6 <i>h</i>	<i>m</i> ..	0.3866	0.085	1/4		non-coplanar triangle U ₃
U2	2 <i>c</i>	-6..	1/3	2/3	1/4		tricapped trigonal prism Cl ₉

Transformation from published data: *y,x,-z*
 Experimental: single crystal, diffractometer, X-rays, *wR* = 0.023

Remarks: The data from [2] are also reported in [3]. In [3] the Wyckoff position of the U site is misprinted as 2*a* (coordinates not specified) instead of 2*c*.

References: [1] Schleid T., Meyer G., Morss L.R. (1987), J. Less-Common Met. 132, 69-77. [2] Zachariasen W.H. (1948), J. Chem. Phys. 16, 254. [3] Zachariasen W.H. (1948), Acta Crystallogr. 1, 265-268.