

Er_3Ru_2	$hP10$	(176) $P6_3/m - hcb$
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Er_3Ru_2 [1]

Structural features: Infinite columns of base-linked RuEr_6Er_3 tricapped trigonal prisms and infinite columns of interpenetrating $\text{Ru}(\text{Er}_6\text{Ru}_2)$ cubes share atoms to form a dense framework.

Fornasini M.L., Palenzona A. (1990) [1]

Er_3Ru_2

$a = 0.7875$, $c = 0.3931$ nm, $c/a = 0.499$, $V = 0.2111$ nm³, $Z = 2$

site	Wyck.	sym.	x	y	z	occ.	atomic environment
Er1	$6h$	$m..$	0.3847	0.0915	$\frac{1}{4}$		square pyramid Ru_5
Ru2	$2c$	$-6..$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{4}$		tricapped trigonal prism Er_9
Ru3	$2b$	$-3..$	0	0	0		square prism (cube) Ru_2Er_6

Experimental: single crystal, diffractometer, X-rays, $R = 0.060$

Remarks: Extended electron density was found along the c-axis; no superstructure reflections were observed. Branch of $\text{Pr}_{1.29}\text{Cl}_3$ antitype.

References: [1] Fornasini M.L., Palenzona A. (1990), Z. Kristallogr. 192, 249-254.