$Er_3Pb_{1.5}[SiO_4]_3$	*hP*40	(176) $P6_3/m$ – ih^4f

$Er_6Pb_3(SiO_4)_6$ [1], apatite family
Structural features: Infinite columns of base-linked PbO_6O_3 tricapped trigonal prisms (partial vacancies ignored) share atoms with SiO_4 tetrahedra to form a 3D-framework; infinite columns of empty face-linked Er_6 octahedra in channels parallel to [001].

Ansell G.B., Wanklyn B.M. (1976) [1]
$Er_3O_{12}Pb_{1.50}Si_3$
a = 0.9642, c = 0.678 nm, c/a = 0.703, V = 0.5459 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12*i*	1	0.3703	0.0924	0.0499		single atom Si
O2	6*h*	*m*..	0.1576	0.5156	$^1/_4$		single atom Si
Er3	6*h*	*m*..	0.2486	0.2349	$^1/_4$		non-coplanar triangle O_3
Si4	6*h*	*m*..	0.4175	0.0292	$^1/_4$		tetrahedron O_4
O5	6*h*	*m*..	0.6125	0.1487	$^1/_4$		single atom Si
Pb6	4*f*	3..	$^1/_3$	$^2/_3$	0.0044	0.75	tricapped trigonal prism O_9

Transformation from published data: *y*,*x*,-*z*
Experimental: single crystal, diffractometer, X-rays, R = 0.044

Remarks: We assume that in [1] the *y*-coordinate of former O(2) is misprinted as 0.4338 instead of 0.4638 (better interatomic distances).

References: [1] Ansell G.B., Wanklyn B.M. (1976), J. Chem. Soc., Chem. Commun. 1976, 706-707.