$Ba_3Sb_7Se_3[CO_3]_{0.75}O_{9.75}$	*hP*68	(176) $P6_3/m$ – i^3h^4fe

$Ba_6[Sb_{12}O_{18}](SbSe_3)_2(CO_3)_{1.5}O_{1.5}$ [1], cetineite family
Structural features: :SbO_3 ψ-tetrahedra share vertices to form infinite tubes with Sb_6O_6 rings parallel to [001]; single :$SbSe_3$ ψ-tetrahedra (orientational disorder up-down) between the tubes, Ba atoms and CO_3 trigonal units (partial disorder) in the tubes.

Wang X., Liebau F. (1999) [1]
$Ba_3C_{0.78}O_{11.94}Sb_7Se_3$
a = 1.4405, c = 0.5616 nm, c/a = 0.390, V = 1.0092 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12*i*	1	0.104	0.065	0.107	0.49	single atom C
Se2	12*i*	1	0.1655	0.5197	0.207	0.5	
O3	12*i*	1	0.3461	0.0584	0.001		non-colinear Sb_2
Ba4	6*h*	*m*..	0.0917	0.2498	$^1/_4$		10-vertex polyhedron O_{10}
O5	6*h*	*m*..	0.347	0.22	$^1/_4$		non-colinear Sb_2
Sb6	6*h*	*m*..	0.4015	0.3776	$^1/_4$		non-coplanar triangle O_3
Sb7	6*h*	*m*..	0.4413	0.1586	$^1/_4$		non-coplanar triangle O_3
Sb8	4*f*	3..	$^1/_3$	$^2/_3$	0.0991	0.5	single atom Sb
C9	4*e*	3..	0	0	0.078	0.39	

Transformation from published data: *y*,*x*,-*z*; origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.063

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

References: [1] Wang X., Liebau F. (1999), Z. Kristallogr. 214, 820-834.