



# Lithium Tantalate

## End-uses

Single crystal growth.

Wafers made from these crystals are used mainly in the manufacturing of SAW-filters, optical modulators for DWDM, and nonlinear optical applications.

## Form

White tablets

## Dimensions

Weight of each tablet ~ 125 gram

Diameter: 40-140 mm, Height: 10-50 mm. Adhesion, cracks, breakage and cleavage of tablets are permissible.

Under agreement with Buyer, dimensions of tablet could be changed. Ratio of material of stoichiometric and congruent chemistry is defined with Buyer

## Grades

Grade C – stoichiometric chemistry

Grade K – congruent chemistry

## Package

Cartridge containing from 4 to 8 tablets is hermetically sealed with double polymer film.

Grade C is labeled with blue strip, Grade K is labeled with red strip.

## Specifications

Chemical composition:  $\text{LiNbO}_3$

Элементы	Content	
	Grade C	Grade K
Molar ratio $\text{Li}_2\text{O}/(\text{Li}_2\text{O}+\text{Nb}_2\text{O}_5)$	0.490-0.510	0.470-0.490
Li, %	2.82 – 3.02	2.62 – 2.82
Ta, %	76.4 – 76.8	76.8 – 77.2
	Примеси, ppm	
AL	10	10
V	2	2
Bi	2	2
Fe	5	5
Ca	5	5
Co	3	3
Si	20	20
Mg	5	5
Mn	1	1
Cu	2	2
Ni	5	5
Sn	5	5
Pb	1	1
Sb	2	2
Cr	5	5
Zr	2	2
Ti	5	5
$(\text{SO}_4)^{2-}$	200	200