

MPIL Minerals & Metals Specification Sheet

Tantalum Oxide

	%	Typically	Minimum
TA205		99.7	99.5
Bulk density	g/cc		
LOI	%	0.1	0.2
Impurities			
Fluorine (F)	Ppm	250	400
Iron (Fe)	Ppm	<100	200
Magnesium	Ppm	<50	50
Manganese	Ppm	<50	50
Niobium	Ppm	400	600
Antimony	Ppm	<50	100
Titanium	Ppm	<50	50
Silicon	Ppm	<50	100
Tungsten	Ppm	<50	100

Tantalum Oxide Optical Grade

		MAX
Niobium (Nb)	PPM	50
Titanium (Ti)	PPM	10
Silicon (Si)	PPM	30
Iron (Fe)	PPM	10
Copper (Cu)	PPM	10
Cobalt (Co)	PPM	10
Nickle (Ni)	PPM	10
Chrome (Cr)	PPM	10
Potassium/Sodium	PPM	2000
K/Na		

Potassium Fluorotantalate (K₂TaF₇)

		Typical	Max
Antimony (Sb)	Ppm	20	50
Calcium (Ca)	Ppm	30	50
Iron (Fe)	Ppm	10	30
Magnesium	Ppm	10	30
Manganese (Mn)	Ppm	10	30
Molybdenum	Ppm	n.d.	30
Niobium (nb)	Ppm	20	50
Phosphorus	ppm	10	50
Silica	Ppm	n.d.	10
Titanium (Ti)	Ppm	10	20
Tungston (w)	Ppm	10	30

Niobium Oxide

		Typically	Minimum
Nb2O5	%	99.7	99.5
Bulk Density	g/cc	0.06	0.1
			MAX
LOI @1050c	%	0.06	0.1
Impurities			
Fluorine (F)	Ppm	250	400
Iron (Fe)	Ppm	100	150
Magnesium (Mg)	Ppm	<50	50
Manganese (Mn)	Ppm	<50	50
Antimony (Sb)	Ppm	<50	100
Silicon (Si)	Ppm	<50	100
Tantalum (Ta)	Ppm	200	400
Titanium (Ti)	PPM	<50	50
Tungsten (W)	Ppm	<150	150