

# Rutile Sand

**Product:** Rutile sand

**Grade:** 89 %

Chemical Composition:		
Element	Unit	Value
Moisture Content (H2O)	%	0.12
TITANIUM OXIDE	%	90.52
IRON OXIDE III	%	1.69
VANADIUM OXIDE	%	0.29
CHROMIUM OXIDE III	%	0-20
90	%	0.30
Al2O3	%	1.23
SiO2	%	2.54
NOBIUM_OXIDE V	%	0.23
CaO	%	0.05
ZIRCONIUM OXIDE	%	2.06
URANIUM	ppm	38.37
THORIUM	ppm	140.93
PHOSPHORUS	%	0.04
SULFUR	%	0.17
URANIUM + THORIUM	ppm	179.30

# Rutile Sand

Particle Size Distribution:		
Sieve Size (microns)	Retained %	Cumulative %
180	2.30	2.30
150	8.79	11.09
125	17.88	28.97
V106	36.86	65.83
90	19.78	85.61
75	11.19	96.80
53	3.20	100.00
D50	114.16	μm

**Product:** Rutile sand

**Grade:** 92 %

Chemical Composition:		
Element	Unit	Value
TiO <sub>2</sub>	%	92.7
Fe <sub>2</sub> O <sub>3</sub>	%	0.92
ZrO <sub>2</sub>	%	2.59

# Rutile Sand

<b>SiO<sub>2</sub></b>	%	1.86
<b>Cr<sub>2</sub>O<sub>3</sub></b>	%	0.12
<b>Al<sub>2</sub>O<sub>3</sub></b>	%	0.31
<b>P<sub>2</sub>O<sub>5</sub></b>	%	0.03
<b>MnO</b>	%	0.02
<b>CaO</b>	%	0.01
<b>MgO</b>	%	0.54
<b>V<sub>2</sub>O<sub>5</sub></b>	%	0.45
<b>Nb<sub>2</sub>O<sub>5</sub></b>	%	0.47
<b>S</b>	%	<0.01
<b>Th + U</b>	ppm	160

**Product:** Rutile sand

**Grade:** 95 %

<b>Composition</b>		<b>Specification</b>	
<b>TiO<sub>2</sub> w/%</b>	≥	95	95.33
<b>S w/%</b>	≥	0.03	0.02
<b>P w/%</b>	≥	0.03	0.02

# Rutile Sand

<b>V w/%</b>	$\geq$	1.0	0.58
<b>Nb w/%</b>	$\geq$	0.5	0.18
<b>SiO<sub>2</sub> w/%</b>	$\geq$	1.5	0.88
<b>LOI(10000 C) w/%</b>	$\geq$	0.2	0.09
<b>ZrO<sub>2</sub> w/%</b>			1.75
<b>Fe<sub>2</sub>O<sub>3</sub> w/%</b>			0.30
<b>Al<sub>2</sub>O<sub>3</sub> w/%</b>			0.26
<b>Cr<sub>2</sub>O<sub>3</sub> w/%</b>			0.21
<b>CaO w/%</b>			0.01
<b>MgO w/%</b>			0.03
<b>Total</b>			99.66

# Rutile Sand

Particle Size Distribution	
+50 mesh	All Pass
-200 mesh	<10%

Typical Particle Size	
+50 mesh	0%
+100 mesh	20.89%
+140 mesh	45.56%
+170 mesh	13.34%
+200 mesh	11.39%
-200 mesh	8.82%