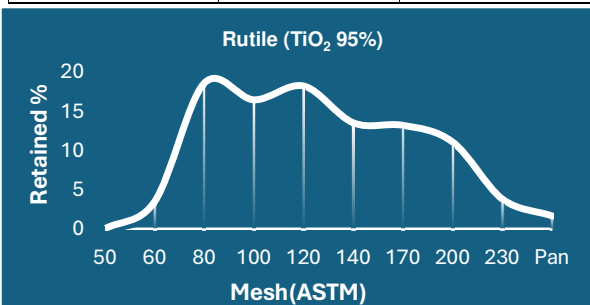


ULTRA PREMIUM RUTILE 95% TiO₂



Particle Size Analysis* ¹			
Mesh	MM	Guaranteed (%)	Retained (%)
50	0.300	< 1	0.02
60	0.250	0 ~ 5	3.02
80	0.180	10 ~ 25	19.02
100	0.150	10 ~ 25	18.40
120	0.125	10 ~ 25	20.14
140	0.106	10 ~ 25	13.94
170	0.090	10 ~ 20	12.54
200	0.075	5 ~ 18	9.58
230	0.063	0 ~ 5	2.54
Pan		< 5	0.80



Mineralogical Report* ⁵		
Minerals	Guaranteed (%)	Typical (%)
Rutile	98.00 Min	98.30
Zircon	2.00 Max	1.46
Leucoxene	0.30 Max	0.12
Others	0.30 Max	0.12

Chemical Content* ²		
Elements	Guaranteed %	Typical (%)
TiO ₂	95.00 Min	96.03
Fe ₂ O ₃	0.300 Max	0.208
SiO ₂	0.750 Max	0.563
ZrO ₂ +HfO ₂	1.500 Max	1.217
Al ₂ O ₃	0.250 Max	0.105
V ₂ O ₅	0.800 Max	0.701
P*	0.025 Max	0.020
P ₂ O ₅	0.050 Max	0.048
S*	0.008 Max	0.004
SO ₃	0.020 Max	0.008
CaO	0.020 Max	0.010
MgO	0.008 Max	0.003
Nb ₂ O ₅	0.250 Max	0.146
U(ppm)	75 Max	40
Th (ppm)	50 Max	18

Physical Parameters		
Parameters	Guaranteed	Typical
LOI @ 1000°C* ⁶	0.50 % Max	0.16 %
H ₂ O @ 110°C* ⁷	0.50 % Max	0.15 %
Radioactivity	700 Bq/kg Max	590 Bq/kg
Specific gravity	4.2 ~ 4.5	4.3
Bulk Density	2.5 to 2.7 t/m ³	2.52 t/m ³
Colour	Brown/Black	Black
Structure	Tetragonal	Tetragonal
Hardness	6 to 6.5 mohs scale	6.5 mohs scale

1. Particle Size determined by the method of ASTM C136

2. Chemical assay tested by X Ray Florescence Spectrometry (Epsilon 1 / Axios Max). Instrument calibrated with standard samples and tested by Bureau Veritas.

3. * Element Phosphorus (P) calculated from the Compound P₂O₅ by its molecular mass

4. * Element Sulphur (S) calculated from the

5. Mineral purity determined by Grain counting.

6. Loss on ignition (LOI @1000°C) determined gravimetrically.

7. Moisture content (H₂O) determined by the method of ASTM C566/ISO 11127-5.

8. This material is naturally occurring and some variations in grain size and/or chemical analyses can be expected. Other guarantees for specific elements are subject to discussion for individual contracts.

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