

All technical data presented represent typical results, unless stated otherwise as min/max values. No guarantee is made that material will meet exactly the values shown.

Titanium Dioxide, High-Purity Powders

Pred Materials is pleased to market advanced TiO₂ powders. These are produced by gas-phase reactions between refined TiCl₄ and O₂ under specially controlled conditions at high temperatures. With such high purity, these powders are used mainly in the electric and electronic industries as the material for electro-ceramic parts, such as PTC (Positive Temperature Coefficient) thermistors and MLCC (Multi-Layer Ceramic Capacitors). Our TiO₂ has recently found applications in optical glass lenses, replacing lead-containing compounds. Production capacity is 180 metric tons per month.



Applications



- **Electrode of MLCC**
- **Dielectric for MLCC**
- **PTC Thermistor**
- **Dielectric Resonator & Filter**
- **Piezo Electric Element**
- **Pharmaceutical**

Specifications

(1) Grades for Electronic Use

Grade	TiO ₂ % min.	Al % max.	Fe % max.	Cl % max.	Rutile content %	Ignition Loss %	Surface Area m ² /g	Average Size μm
0210	99.9	0.002	0.002	0.01	≥90	≤0.1	2 - 3	2.10 - 2.55
0514	99.9	0.002	0.002	0.025	≥90	≤0.25	5.5 - 7.5	0.50 ~ 1.00
1311	99.9	0.002	0.002	0.045	≥80	≤1.00	8 - 14	0.30 ~ 0.90
1701	99.9	0.002	0.002	0.05	≥80	≤0.95	50 ~ 80	≤0.42
2301	99.9	0.002	0.002	0.10	≥80	≤1.50	20 - 25	<0.25
2321	99.9	0.001	0.001	0.13	≤10	≤1.50	20 - 27	--

(2) 4N grade

Grade	TiO ₂ % min.	Al	Fe	Si	Sn	As	Ni	Cr	Cu	Cl	Rutile Content % min.	Surface Area m ² /g
		ppm max.										
0270	99.99	1	5	1	1	5	1	1	1	100	90.0	2 - 3

Application: Advanced ceramics, Specialty materials

Product type: Consumables, Chemicals

Production scale: Lab, Pilot, Commercial

Search tags: Advanced Ceramics, Raw material, Piezoelectric raw material