

<b>TITANIUM OXIDE PREMIUM TITANIUM OXIDE</b>		
<b>CHARACTERISTICS</b>	<b>GRADE A</b>	<b>GRADE (PG)</b>
Volatile matter at 105°C	0.5% (max)	0.3% (max)
Residue on 45 microns (325 mesh IS sieve)	0.10% (max)	0.04% (max)
Oil absorption	15-30%	15-30%
Colour in Oil	Close match to the approved sample	Close match to the approved sample
Reducing power	Not inferior to the approved sample	Not inferior to the approved sample
Relative density at 27°C	3.7 – 3.9	3.7 – 3.9
Matter should in water	0.50%(max)	0.50% (max)
pH of 20% pigment slurry in distilled water	6-8	6-8
Titanium dioxide	98.00%(min)	98.00%(min)
Fe	170ppm(max)	100ppm(max)
P <sub>2</sub> O <sub>5</sub>	0.50%(max)	0.50%(max)
Applications:	Paints, Plastics, Paper, Rubber, Printing inks, Leather Goods	Plastics Mater Batches, Paint textiles.

<b>RUTILE GRADE UNCOATED TITANIUM DIOXIDE RUTILE PREMIIUM GRADE TiO<sub>2</sub></b>		
<b>CHARACTERISTICS</b>	<b>RD-01</b>	<b>RD-01 (PG)</b>
Volatile matter at 105°C	0.5% (max)	0.5% (max)
Residue on 45 microns (325 mesh IS sieve)	0.10% (max)	0.05% (max)
Oil absorption	15-30%	15-30%
Colour in Oil	Close match to the approved sample	Close match to the approved sample
Reducing power	Not inferior to the approved sample	Not inferior to the approved sample
Relative density At 27°C	3.9 – 4.2	3.9 – 4.2
Matter should in water	0.50%(max)	0.50% (max)
pH of 20% pigment slurry in distilled water	6.5-8.5	6-8
Titanium dioxide	98.00%(min)	98.00%(min)
Fe	170ppm(max)	100ppm(max)
P <sub>2</sub> O <sub>5</sub>	0.50%(max)	0.50%(max)
Applications:	Paints, Plastics, Paper, Rubber, Printing inks, Leather Goods	Plastics Mater Batches, Paint textiles.

### Special Grade Titanium dioxide

Characteristics	Requirement
TiO <sub>2</sub>	98.0(max)
Residue on 45 microns (325 mesh IS sieve)	5.0 (max)
P <sub>2</sub> O <sub>5</sub>	0.20%(max)
SiO <sub>2</sub> %	0.50%(max)
S%	0.04%(max)
Moisture %	0.50(max)

### Potassium Titanate

Characteristics	Requirement
TiO <sub>2</sub>	70-76
K <sub>2</sub> O%	17-20
Na <sub>2</sub> O%	0.05(max)
Sulfur %	0.03(max)
Phosphorus%	Traces
Moisture%	5.0(max)
Residue(325mesh)	5.0(max)
SiO <sub>2</sub>	1.0(max)

### Application

Automobile Industry  
 Brake Pads  
 Welding Rods

<b>Lithium Titanate based lithium-ion batteries for high power applications like Electric Vehicles</b>	
<b>Typical properties</b>	
Appearance	White powder
Product	Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub>
Spec. Capacity (mAh/g)	140-155
First Dis. Efficiency (%)	≥99.7
pH	11.5
Purity %	99(min)
LOI %	<0.5
Tap density g/cc	1.2
<b>Applications:</b> It is the anode component of the fast-recharging lithium- Titanate batteries. It is also used as an additive in porcelain based on titanates.	