

## TITANIUM DIOXIDE

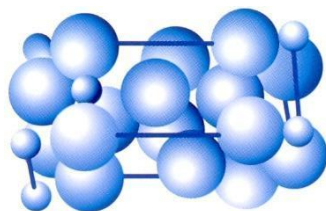
**Titanium Dioxide** is a micronized powdered inorganic pigment obtained from ilmenite mineral. It is produced by two processes: Sulfate process and Chlorine process.

In sulfate process, the mineral is subject to a digestion with sulfuric acid and extracted as sulfate salts and then is subject to a hydrolysis, calcination and a grinding stage.

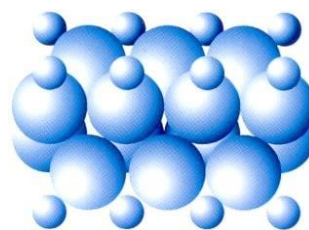
In the chlorine process is used chlorine instead of sulfuric acid, as a result it can produce in most economical form less-impurities products, and it has the environment-friendly advantage.

Due to its tetragonal crystalline form, **Titanium Dioxide** is found in nature in two main forms:

- *Anatase*



- *Rutile*



### Properties

<i>Appearance:</i>	White powder
<i>TiO<sub>2</sub>, %:</i>	> 90.0 %
<i>pH (aqueous solution):</i>	6.0 – 8.5
<i>Oil absorption (g/100g):</i>	35.0 max.
<i>Humidity, %:</i>	1.0 max.
<i>Retained in 325 mesh, %:</i>	0.5 – 1.0
<i>Average density (g/cm<sup>3</sup>):</i>	3.9 – 4.1

### Treatment

**Titanium Dioxide** is characterized by a surface treatment that allows improving its dispersibility properties, tint-reducing power, surfaces compatibility and oil absorption. The commonly used treatments are:

- Organic
- Inorganic: Alumina, Silica, Zinc

## Applications

**Titanium Dioxide** is characterized by a great tint-reducing power, good dispersibility and an excellent performance, which may be visualized in the cost-benefit. It is used in many industries in broad applications within which are:

- Paper
  - Coated papers
  - Flat papers
  - Paper laminates
- Paints
  - Interior paints
  - Exterior paints
  - Automotive paints
  - Vinyl paints
  - Acrylic paints
- Inks
  - Flexography
  - Off-set
  - Printing
- Plastics
  - PVC
  - Polyolefin
  - ABS
  - Engineering plastics
  - Rubber
- Textile
  - PET fibers
  - Polyester fibers

## Safety

**Titanium Dioxide** is not classified as a hazardous material if proper precautions are taken in handling of chemicals under the classification of the 67/548/EEC Direction.

## Packaging and Storage

**Titanium Dioxide** is available at 25 Kg paperbags. Keep away from dyestuffs to avoid any possible contamination by volatile matter.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Básicos y Colorantes S.A. de C.V. will not be responsible for damages resulting from use of or reliance upon this information.

**Básicos y Colorantes, S.A. de C.V.**

San Francisco No 12, Col. San Francisco Cuautlalpan, Naucalpan Edo. de México  
Tel. +52 55 5358-2011, Fax. +52 55 5358-2685, <http://www.byc.com.mx>