

Titanium Dioxide Rutile

Properties and Characteristics

Titanium Dioxide of good commercial grade a fine white powder with good light scattering ability, and therefore good achromatic (tint-reducing) and covering power. It is high in color strength and chemical stability with excellent weatherability properties. It is insoluble in water, while soluble in hot, concentrated levels of strong acid and alkali. Titanium Dioxide is considered as one of the world's best performing pigments, and is widely used in paint, plastic, paper, printing ink, chemical fiber, rubber and cosmetic industries.

Specifications

Property	Value
CAS Number	1317-80-2
EINECS Number	13463-67-7; 236-675-5
Standard	ISO9001:2000
Molecular Formula	TiO ₂
Molecular Weight	79.86
Appearance	White to off-white powder
Assay	93% min
Tint-reducing Power	100% min
Oil Absorption (g/100g)	22 max
Suspension pH	6.5-8.0
Residue on 45µm Sieve	0.1% max
Water Soluble Content	0.3% max
Volatiles	0.75% max

Applications

- Pigment in enamel and latex paints, water and solvent-based paints, varnishes, lacquers, ceramics
- Textile, chemical and artificial fiber industries
- Paper and paperboard production industries, e.g. renders papers with varying levels of opacity
- Pigment in plastics and rubbers
- Electrical appliances, e.g. electric-welding rods, nonconductors
- Construction materials
- Pigment in elastomers
- Component of porcelain enamels and glazes
- Industrial surface coatings and fillers
- May be safely used as a color additive and indirect food additive for use only as a component of adhesives

Packaging

25kg or 50kg polypropylene woven bags lined with polyethylene film bags.

Handling

Avoid inhalation and contact with eyes, skin, and clothing. Use with adequate ventilation to keep airborne concentrations low.

Storage

Store in a tightly closed container in a dry and cool place, away from incompatible materials. Keep container closed when not in use. Store above freezing.