



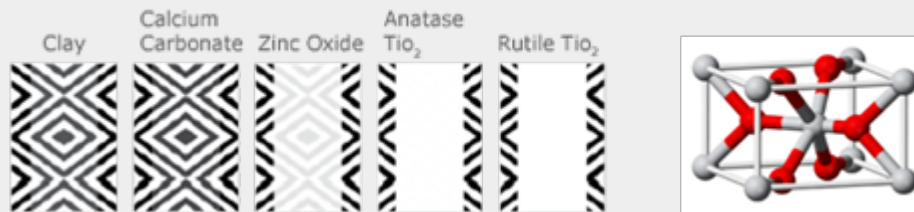
METALTEK
Metalurji Sanayi ve Ticaret A.Ş.

TITANIUM DIOXIDE (TiO₂)

INTRODUCTION

Titanium dioxide is a white inorganic compound, which has been used for around 100 years in a vast number of diverse products. It is depended on it for its non-toxic, non-reactive and luminous properties, which safely heighten the whiteness and brightness of many materials.

It is the whitest and brightest of known pigments, with reflective qualities; it can also both scatter and absorb UV rays. It exists in two crystalline forms, anatase and rutile. Almost all titanium dioxide used in paint industries are **rutile**. Anatase can be converted to rutile by heating at 700-950 ° C.



TITANIUM DIOXIDE APPLICATION

- ◆ As a white pigment, TiO₂ is one of the most important raw materials for paints and coatings.
- ◆ As a photocatalyst, it can be added to paints, cements, windows and tiles to degrade environmental contaminants.
- ◆ It is less-used in some industries such as packaging, commercial printing ink, cosmetics, toothpaste, and food.

SUPPLIED TITANIUM DIOXIDE GRADE

LOMON R-996 pigment produced by Lomon Billions is a zirconia and alumina treated rutile titanium dioxide pigment produced by the sulfate process. It is a highly durable, versatile pigment suitable for a wide range of application.



LOMON R-996 KEY FEATURES

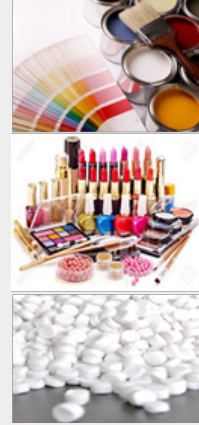
Careful control of the TiO₂ particle size during the manufacturing process of LOMON R-996 pigment results in:

- ◆ good gloss performance
- ◆ good brightness
- ◆ high opacity
- ◆ easy dispersibility

LOMON R-996 APPLICATIONS/ PROPERTIES

- ◆ Industrial coatings
- ◆ Powder coatings
- ◆ External & internal architectural coatings

- ◆ Water-based coatings
- ◆ Solvent-based coatings
- ◆ Coil coatings
- ◆ Wood coatings
- ◆ Can coatings
- ◆ Anticorrosive paints
- ◆ PE/PP base masterbatches



Physical Properties	Units (SI)	Typical Values
TiO ₂ content	%	95
Moisture when packed	% max	0.5
Bulk density	g/cm ³	1.2
Specific gravity	g/cm ³	4.1
Oil absorption	g/100g	18
PH		7
Color index		Pigment white 6
Inorganic coating		Alumina, Zirconia
Suitable for		Polyolefins/ Acrylics/ Vinyls