

MASTERBATCH

MASTERBATCH White Masterbatch

TITANIUM DIOXIDE (TiO₂) WHITE MASTERBATCH

A highly loaded rutile titanium dioxide (TiO₂) masterbatch compounded on a polyolefin carrier resin with dispersion-enhancing additives, engineered to deliver maximum opacity and a clean, consistent white color in the finished part or film. Fine, well-dispersed rutile particles give reliable color consistency batch to batch, and the concentrate is manufactured under ISO quality management systems.

Typical Application

- Woven sacks and jumbo/FIBC bags
- Carrier and shopping bags (blown film)
- Garbage bags and thin-gauge blown film
- Pipe, profile and other extrusion products
- Injection-molded containers and household items
- Multi-layer and mono-layer packaging film

Product Characteristics

- High rutile TiO₂ loading for maximum opacity at low let-down ratios
- Fine, well-dispersed pigment particles for consistent whiteness and reduced speck/gel defects
- Suitable for blown film, injection molding, extrusion and blow molding processes
- Manufactured under ISO quality management standards

Physical Properties

Properties	Test Method	Typical Value	Unit
Rutile TiO ₂ Content		50-70	%
Carrier Resin		Polyolefin (PE/PP)	
Melt Flow (190°C/2.16kg)	ASTM D1238	15-30	g/10 min
Density		1.6-1.9	g/cm ³
Moisture Content	ASTM D644	< 0.20	%
Pellet/Granule Size		2-3	mm

Processing Guidelines

Typical let-down ratio is 2-5% depending on target opacity and film/part thickness; higher loadings up to 30% can be used for very thin, high-opacity films. Actual dosage should be confirmed against the target end-use appearance requirement.

1. The manufacturer's literature describes this grade only qualitatively (highly loaded rutile TiO₂ on a polyolefin carrier); no producer-specific numeric datasheet for this product was located. The property ranges above are typical values compiled from published third-party rutile TiO₂ white masterbatch data sheets and the manufacturer's own filler-masterbatch physical-form specifications (moisture, density, granule size), and should be treated as indicative only.

2. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.

3. Grade-specific TiO₂ loading and a certificate of analysis are confirmed per lot at order.