

TECHNICAL DATA SHEET (TDS)

Product Name: High-Performance Black Masterbatch

Product Code: SLM-BK950 (Premium Series)

Carrier Resin: LDPE/Universal

Manufacturing Process: Optimized Black Titanium Powder Synthesis

Website: www.slmb.com

1. Product Description

SLM-BK950 is a high-concentration black masterbatch manufactured using our newly optimized **Black Titanium Powder** process. It is designed for applications requiring superior jetness, excellent carbon black dispersion, and high UV resistance. This grade is specifically engineered to reduce material input costs while maintaining premium surface finishes in pipes, films, and injection molded parts.

2. Physical Properties

Property	Test Method	Typical Value	Unit
Carbon Black Content	ASTM D-1603	50% ± 2%	%
Carrier	---	PE (Universal Compatible)	---
Melt Flow Index (MFI)	ASTM D-1238	15.0 – 25.0	g/10 min (190°C/2.16kg)
Density (23°C)	ASTM D-792	1.25	g/cm³
Moisture Content	ASTM D-644	< 0.10%	%
Heat Resistance	---	280°C	°C
Light Fastness	ISO 105-B02	8	Grade (1-8)
Filter Pressure Value	EN-13900-5	< 1.5	bar/g

3. Application Areas

- Pipe Extrusion:** HDPE/PPR water pipes, irrigation pipes, and corrugated conduits (Meets UV protection standards).
- Film Blowing:** Agricultural mulch films, heavy-duty bags, and garbage bags (Ensures high opacity and thinning performance).
- Injection Molding:** Automotive components, electronic housings, and industrial parts (Superior surface gloss).

4. Recommended Addition Rate

The dosage depends on the requirements of the final product.

- Standard Injection/Extrusion:** 1% – 4%
- High Opacity Film:** 2% – 5%

5. Packaging & Storage

- Packing:** 25kg moisture-proof valve bags (PE or Paper-Plastic bags).
- Storage:** Keep in a cool, dry, and ventilated place. Avoid direct sunlight and moisture.

- **Shelf Life:** 12 months from the date of production when stored correctly.
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6. Technical Advantages (SLM Innovation)

- **Optimized Pigment Synthesis:** Our proprietary Black Titanium Powder process ensures a more uniform particle size distribution compared to traditional methods.
 - **Enhanced Dispersion:** Minimal "nibs" or gels in film applications, significantly reducing scrap rates for the end-user.
 - **Cost-Efficiency:** Engineered to provide a 10-15% cost advantage without compromising the "jetness" (blackness) index.
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Disclaimer: *The information provided above is based on our current knowledge and laboratory testing. It is intended as a general guide. Since the conditions of use are beyond our control, we recommend customers conduct their own trials before full-scale production.*

For samples and customized formulations, please visit:  www.slmmb.com

 Contact:Dorothy.li salesl.dorothy@gmail.com Sales Department