

MASTERBATCH**MASTERBATCH CA-E50X****PE CALCIUM CARBONATE FILLER MASTERBATCH**

This filler masterbatch is a concentrated dispersion of calcium carbonate (CaCO₃) in a polyethylene carrier resin with processing additives, formulated to retain mechanical strength and melt processability at high filler loading. It provides a cost-effective way to replace part of the virgin resin in demanding, high-strength packaging applications.

Typical Application

- Heavy-duty sacks
- PE blown film
- Injection molding
- Extrusion molding (pipe, bar)
- Blow molding

Product Characteristics

- Formulated for enhanced mechanical strength retention at high filler loading
- Good melt processability
- Suitable for demanding heavy-duty sack applications

Physical Properties

Properties	Test Method	Typical Value	Unit
Carrier Resin (PE) + Additives Content		15-30	%
Calcium Carbonate (CaCO ₃) Content		83	%
CaCO ₃ Particle Size	Malvern Mastersizer 2000	1-3	µm
Melt Flow Index (190°C/2.16 kg)	ASTM D1238	5-40	g/10 min
Moisture	ASTM D644	< 0.12	%
Density		1.6-1.9	g/cm ³

Processing Guidelines

Recommended addition rate is 10-15% into polyethylene formulations for heavy-duty sack film, where mechanical strength retention is critical; higher loadings can be used in less demanding blown film, injection, and blow molding applications. Supplied as 2-3 mm cylindrical granules for direct metering alongside virgin resin.

1. Calcium carbonate content is specific to this grade; melt flow, particle size, moisture, and density are typical of the producer's polyethylene filler masterbatch family.
2. Typical values per the producer's published family data; grade-specific certificate of analysis supplied per lot at order.
3. 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.