

SiSiB® SiM4112 Silicone Masterbatch

INTRODUCTION

SiSiB® SiM4112 is a high-performance slip masterbatch consisting of ultra-high molecular weight polydimethylsiloxane (UHMW PDMS) dispersed in polyethylene (PE) resin. It is specifically designed for use in PE film applications, providing long-lasting slip performance, excellent thermal stability, and non-migrating characteristics. Ideal for cast and blown film processes.

BENEFITS

- Reduces COF, improving slip and anti-blocking properties
- Non-migrating, no precipitation or powdering on film surface
- Excellent high-temperature slip performance on metal rollers
- Enhances processing efficiency and reduces equipment fouling
- Compatible with antistatic and anti-blocking additives
- Improves release performance in release film applications

PHYSICAL PROPERTIES

| | |
|------------------------------|---------------------------|
| Color and Appearance | White or off-white pellet |
| Concentration | 100% |
| Melt index (190°C, 2.16Kg) | 5-15 g/10 min |
| Volatiles (% , 105°C, 2h) | Max.0.2 |
| Density (kg/m ³) | 500-600 |
| PDMS content (%) | 50 |
| Carrier resin | PE |
| Active slip additive | UHMW PDMS |

APPLICATIONS

SiSiB® SiM4112 is used in polyethylene films requiring excellent slip and surface performance, including packaging films, release films, and metallization films. Suitable for high-speed processing environments such as cigarette wrap films where hot slip is essential.

USAGE GUIDELINES

- Recommended dosage: 0.5–5% depending on required slip performance
- Apply in the skin layer to ensure surface effectiveness
- For better dispersion, dilution is suggested before feeding into the extruder
- In the initial processing phase, it may purge residual materials from the extruder, causing temporary optical defects (e.g., gel points), which

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stabilize during continued production

PACKING

SiSiB® SiM4112 is supplied in 25Kg craft paper bag with PE inner bag.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

STORAGE

In the unopened original container SiSiB® SiM4112 has a shelf life of two year in a dry and cool place.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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