

SiSiB® SP5060 Siloxane Powder

INTRODUCTION

SiSiB® SP5060 is a white powder containing 55% ultra-high molecular weight siloxane dispersed in silica. It is designed to enhance processing and surface properties of thermoplastics. Unlike traditional additives such as amides, waxes, or silicone oils, it offers excellent thermal stability, non-migration, and high compatibility without carrier resins.

BENEFITS

- Improves melt flow, mold filling, and demolding efficiency
- Reduces extruder torque and equipment wear
- Provides excellent surface smoothness, gloss, and silky feel
- Lowers coefficient of friction, enhances abrasion and scratch resistance
- Improves flame retardancy and impact strength in high-filler systems
- Stable and non-migrating; excellent compatibility with thermoplastics
- Improves dispersion of fillers and pigments; reduces agglomeration
- Enhances rheological behavior and production efficiency

PHYSICAL PROPERTIES

Appearance	White powder
Siloxane content	55%
Dosage (wt %)	0.2-4.0

These values are typical and are not intended for use as specifications.

APPLICATIONS

SiSiB® SP5060 is used in engineering plastics such as PA, PC, and PPS to enhance melt flow and promote crystallization. It improves the surface appearance of reinforced grades (e.g., GF-PA, GF-PPS) by reducing fiber floatation and exposure, resulting in a smoother, more uniform finish. It also helps increase impact strength.

In cable compounds like PVC, SiSiB® SP5060 improves processability and imparts a smoother, more pleasant surface feel.

In elastomers, adding 2–4% of SiSiB® SP5060 significantly enhances surface lubricity.

USAGE GUIDELINES

SiSiB® SP5060 should be pre-mixed with the base resin prior to extrusion or compounding to ensure uniform dispersion. For moisture-sensitive materials, it is recommended to pre-dry the mixture at 150°C for 2–4 hours

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before processing.

Typical addition levels are:

- **0.5–1.0 wt%** to improve processing, flow, and mold release
- **1.0–4.0 wt%** to enhance surface smoothness, gloss, and resistance to scratch and abrasion

PACKING

SiSiB® SP5060 is supplied in 25Kg craft paper 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® SP5060 has a shelf life of 24 months 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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