

SiSiB® AP5100 Siloxane Additive

INTRODUCTION

SiSiB® AP5100 is a functional alkoxy polysiloxane additive designed to improve LOI (Limiting Oxygen Index) in low-smoke halogen-free wire & cable compounds and to enhance filler dispersion. It also provides hydrophobicity to inorganic filler surfaces, ensuring stable compounding, better processing, and long-term performance.

FEATURES & BENEFITS

- Improves LOI value of HFFR compounds
- Enhances dispersion and de-agglomeration of inorganic fillers (ATH, MDH, etc.)
- Imparts hydrophobic surface treatment to fillers
- Improves process stability and productivity
- Low viscosity, easy handling
- High flash point

PHYSICAL PROPERTIES

Appearance	Light yellow transparent liquid
Viscosity (25°C, cSt)	50-150
Active Content (%)	Min. 90
Volatile (%)	Max. 10
Flash Point (°C)	Min.120

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

BENEFITS & APPLICATIONS

SiSiB® AP5100 can be applied directly to inorganic fillers such as ATH or MDH by pre-treatment or in-situ blending with polymers including EVA, PE, PP, PU, or rubber, thereby promoting filler dispersion, de-agglomeration and imparting hydrophobicity to the filler surface. This not only increases flame retardant efficiency but also improves compounding consistency and overall productivity.

USAGE GUIDELINES

In-situ blending:

Add directly to extruder or mixer at ~1% of filler weight (1-10 µm particle size). For some applications, dosage may be 2-3%.

Pre-treatment:

Apply neat or in hydrocarbon/alcohol solution onto fillers by atomization,

SiSiB® AP5100 Siloxane Additive

spraying, or dipping. Typical dosage 1-3%. After application, dry at ambient or 105-120 °C to complete condensation and remove volatiles.

PACKING

SiSiB® AP5100 is available in 25Kg pails, 200Kg drums and 1000Kg IBC tote.

STORAGE

SiSiB® AP5100 may be stored up to one year in a sealed container. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat or sunlight could reduce product life. Keep containers sealed when not in use.

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.

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.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability.

We disclaim liability for any incidental or consequential damages.