

SiSiB® SiE6150 Thermoplastic Elastomer

INTRODUCTION

SiSiB® SiE6150 is a silicone-based thermoplastic elastomer (Si-TPV) developed using proprietary compatibility and dynamic vulcanization technologies. Fully vulcanized silicone rubber particles (1-3 μ m) are finely dispersed within a maleic anhydride grafted polyolefin elastomer (MAH-POE) matrix, forming a distinct sea-island morphology. It offers excellent compatibility with olefin-based resins and TPU, and is particularly effective for improving surface touch, abrasion resistance, and stain resistance when blended with polyolefins.

BENEFITS

- Enhances soft-touch and smoothness of olefin surfaces
- Improves abrasion and stain resistance
- Plasticizer-free, non-bleeding formulation
- High elongation and tear resistance
- Compatible with polyolefin extrusion and cast film processes

PHYSICAL PROPERTIES

Appearance:	White to off-white pellets	
Silicone Content (%)	40	
MAH-POE (%)	60	
Hardness (Shore A):	51	ISO 868: 2003
Specific Gravity:	1.02	ISO 1183-1: 2019
Melt Flow Index:	6.7	ISO 1133-1: 2011
		(g/10min, 10kg, 190°C)
Elastic Modulus (MPa):	2.4	ISO 37: 2017
Tensile Strength (MPa):	3.5	ISO 37: 2017
Elongation at Break (%):	740	ISO 37: 2017
100% Modulus (MPa):	1	ISO 37: 2017
Tear Strength (kN/m):	39.4	ISO 34-1: 2015

These values are typical and not intended for specification purposes.

APPLICATIONS

SiSiB® SiE6150 is recommended for reducing the surface hardness of HDPE and enhancing tactile feel. It can also be incorporated into polyolefin systems to improve abrasion resistance and stain resistance.

USAGE GUIDELINES

SiSiB® SiE6150 is recommended for extrusion processing.

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Suggested extrusion temperature settings:

Zone 1	160-170°C
Zone 2	160-170°C
Zone 3	170-180°C
Zone 4	180-190°C
Nozzle or Die	180-190°C

PACKING

SiSiB® SiE6150 is supplied in 25 kg paper-plastic composite bags with a PE inner liner for moisture protection.

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 original unopened packaging, SiSiB® SiE6150 has a shelf life of 24 months in a cool and well-ventilated 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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