

SiSiB® HR7251 Flame Retardant Silicone Rubber

INTRODUCTION

SiSiB® HR7251 is a flame-retardant silicone rubber compound designed for compression and injection molding. It offers good mechanical properties, processability and rebound resilience, together with low compression set. It is available in white and black.

KEY FEATURES

- Good flame retardancy
- Good tensile strength and elongation
- Good rebound resilience
- Low compression set
- Good molding and processing characteristics
- Available in white and black

PHYSICAL PROPERTIES

Property and Unit	Specification	Test Method
As supplied		
Appearance	White or black	Visual inspection
Plasticity Number, 1/100 mm	220-260	ISO 7323:2006
As cured		
Density, g/cm ³	1.35-1.40	ISO 2781:2018
Hardness, Shore A	50-60	ISO 48-4:2018
Tensile Strength, MPa	Min. 7.0	ISO 37:2024
Tear Strength, kN/m	Min. 20	ISO 34-1:2022
Elongation at Break, %	Min. 400	ISO 37:2024
Compression Set, 180°C/22 h, %	Max. 30	ISO 815-1:2019
Rebound Resilience, %	Min. 50	ISO 4662:2017
Volume Resistivity, Ω·cm	Min. 1.0 × 10 ¹⁵	IEC 62631-3-1
Flame Retardancy at 2 mm	Pass	UL 94

Note: Unless otherwise specified, the cured properties were measured on test specimens molded and cured at 170°C for 6 minutes. These values are typical and are not intended for use as specifications.

APPLICATIONS

SiSiB® HR7251 is suitable for molded silicone rubber components used in household appliances and automotive applications where good mechanical properties and flame retardancy are required.

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USAGE GUIDELINES

SiSiB® HR7251 is suitable for compression and injection molding. As an initial processing guideline, a mold temperature of 145–165°C and a curing time of 5–15 minutes are recommended.

The actual curing temperature and time should be optimized according to the curing system, part dimensions, wall thickness, mold design and processing equipment. Where a separate curing agent is required, its type and addition level should follow the agreed product specification. The curing agent should be thoroughly dispersed before molding.

PACKING

SiSiB® HR7251 is supplied in 25Kg carton or 500Kg bulk carton box.

STORAGE

Store SiSiB® HR7251 in a dry place below 30°C. Protect the product from rain, moisture and direct sunlight, and keep the packaging securely closed.

In the original unopened packaging, SiSiB® HR7251 has a shelf life of 6 months from the date of manufacture.

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.

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