

SiSiB® HR3001 HR3002 Platinum-Cured HCR for Cable Accessories

INTRODUCTION

SiSiB® HR3001 and HR3002 are platinum-cured high consistency silicone rubber (HCR) grades designed for extrusion molding applications in cable accessories. The materials provide excellent extrusion performance, outstanding mechanical strength, and superior heat resistance. They are particularly suitable for high-performance wire and cable insulation components and extruded tubing.

KEY FEATURES

- Excellent extrusion properties
- Outstanding mechanical performance
- Superior heat resistance
- Stable electrical insulation performance

PHYSICAL PROPERTIES

Product	HR3001	HR3002
Appearance	Transparent	Light yellow
Density(g/cm ³)	1.12-1.13	1.12-1.13
Curing 120°C × 5min		
Hardness (Shore A)	39-42	39-42
Tensile Strength (MPa)	Min.10.0	Min.10.0
Elongation (%)	Min.750	Min.750
Tension Set (%)	Max.7	Max.7
Tear Strength (KN/m)	Min.38	Min.38
Post-curing 200°C × 2h		
Hardness (Shore A)	42-46	42-46
Tensile Strength (MPa)	Min.10.0	Min.10.0
Elongation (%)	Min.700	Min.700
Tension Set (%)	Max.6	Max.6
Tear Strength (KN/m)	Min.35	Min.35
Rebound Resilience (%)	Min.53	Min.53
Volume Resistivity (Ω·cm)	Min.1.0×10 ¹⁵	Min.1.0×10 ¹⁵
Dielectric Strength (kV/mm)	Min.25	Min.25

The above values are typical and not intended for specification purposes.

USAGE GUIDELINES

SiSiB® HR3001 and HR3002 are designed for platinum-catalyzed addition curing systems.

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Recommended platinum vulcanizing agent dosage:

- Part A: 0.3% - 0.4%
- Part B: 0.4% - 0.5%

Primary curing condition:

- 120°C × 5 minutes

For applications requiring improved thermal stability and electrical performance, post-curing is recommended:

- 200°C × 2 hours

Actual curing conditions may vary depending on equipment, product thickness, and processing requirements.

APPLICATIONS

SiSiB® HR3001 / HR3002 are suitable for manufacturing:

- High-performance wire and cable insulation materials
- Cable accessories and casing
- Extruded silicone tubes and profiles

PACKING

SiSiB® HR3001, HR3002 is supplied in 20Kg Carton.

STORAGE

When stored in the original unopened packaging in a cool and dry place, the shelf life is 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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Sustainable Innovation for a Better Future



SiSiB[®] HR3001 HR3002 Platinum-Cured HCR for Cable Accessories