SiSiB® MR21030 Addition Cure RTV-2 Silicone Rubber for Moldmaking

INTRODUCTION

SiSiB® MR21030 is a two-component, platinum-catalyzed addition cure RTV-2 silicone rubber intended for moldmaking applications.

SiSiB® MR21030 includes Part A and Part B. When mixed at a ratio of 10:1 (A:B), SiSiB® MR21030 cures at room temperature to form a transparent, flexible and durable silicone elastomer suitable for soft mold fabrication.

KEY FEATURES

- Good flowability for fine detail reproduction
- High tear strength and tensile strength
- Low shrinkage
- 10:1 mix ratio
- Room temperature curing
- Stable storage performance

PHYSICAL PROPERTIES

Uncured	
Appearance	Liquid
Color	Translucent
Proportion (A:B)	10:1
Mixing viscosity (23°C) cps	22,000-30,000
Working time (23°C) minutes	90

Cured (23°C / 24 h)	
Hardness (Shore A)	30
Tensile Strength (MPa)	4.5
Elongation at Break (%)	350
Tear Strength (N/mm)	20

Typical values are not intended for specification purposes.

APPLICATIONS

SiSiB® MR21030 is used for soft mold fabrication and detailed reproduction. Typical applications include:

- Label manufacturing
- Mold fabrication for toys, crafts and decorative components

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PROCESSING GUIDE

Mixing

Part A and Part B of SiSiB® MR21030 should be mixed thoroughly at a ratio of 10:1 by weight until a homogeneous mixture is obtained. Mixing may be performed manually or using low-speed mechanical equipment to minimize air entrapment. Metering and dispensing systems may also be used.

Working Time

The working time of SiSiB® MR21030 is approximately 90 minutes at 23°C. Working time is influenced by ambient temperature. Higher temperatures reduce pot life and accelerate curing. Lower temperatures extend working time but also increase overall cure time. For consistent processing results, temperature control is recommended.

Vacuum Degassing

After mixing, the material is preferably degassed under vacuum (30-50 mbar) to remove entrapped air.

During vacuum application, the mixture may expand to approximately 3-4 times its initial volume before collapsing. Degassing typically requires 5-10 minutes. A container with sufficient headspace (3-4 times the initial mixture volume) is recommended.

Curing

SiSiB® MR21030 cures at room temperature. Cure rate increases with temperature and may be accelerated by applying heat. Under normal processing conditions, the addition cure reaction does not generate significant exotherm, helping maintain dimensional stability of the mold.

Certain substances may inhibit platinum-catalyzed addition cure systems, including:

- Sulfur or sulfur-containing materials
- Tin-catalyzed RTV silicones
- PVC stabilized with tin salts
- Amine-cured epoxy systems
- Certain organic solvents (e.g., ketones, alcohols, ethers)

Compatibility testing is recommended when necessary.

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PACKING

SiSiB® MR21030 is supplied in 20Kg or 200Kg drum.

STORAGE

When stored in original unopened containers below 30°C in a dry and cool environment, SiSiB® MR21030 has a shelf life of 12 months from the date of manufacture. Containers should be tightly sealed after opening.

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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