

## SiSiB® LR9199 High Transparency Optical Encapsulant

### INTRODUCTION

SiSiB® LR9199 is a low viscosity two-component addition type thermosetting high transparency optical encapsulant. SiSiB® LR9199 has good fluidity, good dielectric properties and high transparency.

In addition, SiSiB® LR9199 can be cured using a fast and universal temperature control process. It is widely used in LED encapsulation and electrical components, solar cell encapsulation, etc.

### KEY FEATURES

- High light transmittance
- Good yellowing resistance
- Good fluidity
- Different curing temperatures
- Good dielectric properties

### PHYSICAL PROPERTIES

Item	Unit	Result
One or Two part		Two
Color		A: Colorless B: Colorless
Viscosity	mPa.s	A: 500 B: 5000
Viscosity (Mixed)	mPa.s	3000
Heat Cure Time at 120°C	min	10
Working Time 25°C	hour	1.5
TC10	s	14
TC90	s	157
Hardness (Cured)	Shore A	42
Density (Cured)	g/cm <sup>3</sup>	1.032
Transmittance	%	98
Tensile Strength	MPa	5
Breaking Elongation	%	95

### APPLICATIONS

SiSiB® LR9199 is widely used in LED lighting encapsulation, power supplies, sensors, industrial controls, transformers, amplifiers, high voltage resistors, relays and solar cell encapsulation.

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Silicone encapsulation materials usually require a primer in applications where bonding is required. Primer should be applied in a very thin, even coat and then wiped off after application. Apply silicone elastomer after the primer has fully cured.

SiSiB® LR9199 silicone encapsulants may be either room temperature (25°C/77°F) or heat cured. Room temperature cure encapsulants may also be heat accelerated for faster cure.

The curing reaction begins during the mixing process. Initially, curing is manifested by a gradual increase in viscosity, followed by gelation and conversion to a solid elastomer. Tools for taking components A and B should be separated or wiped clean before use to avoid mixing the two components and causing local agglomeration and inability to use them normally.

At 25°C, the safe storage period of A/B after full mixing is 1 day. The higher the temperature, the shorter the storage time.

When using, avoid contact between rubber and compounds containing N, S, P and Sn elements, otherwise it will cause insufficient or incomplete vulcanization.

The optimal ratio of components A/B is 1:1. Too large or too small ratio will affect the final performance effect of the product.

### PACKING

SiSiB® LR9199 is supplied in 20Kg pail or 200kg drum.

### STORAGE

In the unopened original container SiSiB® LR9199 has a shelf life of 6 months in a dry and cool place.

### 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.

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### 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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