

# PRODUCT DATA SHEET

# ESSIL 125

## POLYCONDENSATION SILICONE ELASTOMER

### APPLICATIONS

- Achievement of soft negatives by casting process and soft skin molds dedicated to detailed shapes with undercuts
- Prototyping applications or small-scale serial production for Art & Deco parts

### MAIN PROPERTIES

- Vulcanized by polycondensation
- High tear strength
- Faster catalyst ESSIL 124 available
- High value for elongation at break
- Temperature resistance
- Thixotropable (**ESSIL 126 THIXO**)

### DESCRIPTION

Basis	Two component silicone system
Component A	<b>ESSIL 125</b> , resin, white
Component B	<b>ESSIL 125</b> , slow catalyst, colorless

### PHYSICAL PROPERTIES

		Resin (A)	Catalyst (B)
Component		<b>ESSIL 125</b>	<b>ESSIL 125</b>
Viscosity, 25 °C	BROOKFIELD LVT	45,000	30
Density	mPa.s	1.2	1.0
Mixing ratio	g/cm <sup>3</sup>	100	5
		<b>Mixture</b>	
Colour		White	
Aspect		Liquid	
Pot life, 25 °C, 500 g	Gel Timer TECAM	80	
Demolding time, 23 °C	mPa.s	24	

## MECHANICAL PROPERTIES

(approx. values after hardening 7 days / RT)

Shore hardness	ISO 868	A	24
Tensile strength	ISO 37	MPa	2.7
Elongation at break	ISO 37	%	500
Tear strength <i>Unnotched angular specimens</i>	ISO 34	kN/m	17

## PACKAGING UNITS

- |                                  |                       |
|----------------------------------|-----------------------|
| ■ Resin (A), <b>ESSIL 125</b>    | 5 kg / 20 kg / 200 kg |
| ■ Catalyst (B), <b>ESSIL 125</b> | 0.25 kg / 20 kg       |

## PROCESSING DATA

- The material and processing temperature must be at least 18 °C – 25 °C.
- Select a smooth-walled container that has 5 times the volume of the mixture to be processed.
- Mix the resin individually before use, then mix thoroughly with the catalyst according to the indicated ratio and avoid incorporating air.
- To avoid bubbles the mixture must be degassed under vacuum. Do not maintain vacuum for longer than 5 minutes in order to avoid catalyst vaporization.
- It is possible to mix with fast catalyst **ESSIL 124** in order to obtain intermediate reactivities, while always remaining in ratio 100 of resin and 5 of catalyst. Ex: with a mixture of ESSIL 124 catalyst 2.5 g + ESSIL 125 catalyst 2.5 g with 100 g of ESSIL 125 resin, a pot life 120 minutes is obtained.
- By adding an additive **ESSIL 126 THIXO** to the mixture ESSIL 125 (A) + ESSIL 125 (B) or ESSIL 124 (B), it is possible to obtain a thixotropic silicone applicable with a brush or a spatula on vertical surfaces.
- Add from 0.25 to 0.75 g into the resin mixture 100 g + catalyst 5 g. Be careful, ESSIL 126 THIXO reduces the working time of silicone.
- It is not advisable to heat ESSIL 125 to accelerate its hardening. Do not exceed the indicated time and ratio in order to avoid vulcanization of the product.
- Containers must be closed tightly immediately after use.
- Once opened the product shall be used up as soon as possible.

## STORAGE CONDITIONS

Shelf life	■ Resin (A), <b>ESSIL 125</b>	24 months
	■ Catalyst (B), <b>ESSIL 125</b>	12 months
Storage temperature	■ Resin (A), <b>ESSIL 125</b>	15 °C – 25 °C
	■ Catalyst (B), <b>ESSIL 125</b>	15 °C – 25 °C

## FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Advanced Resins. Copies of the following publications are available on request: Safety Data Sheets.

## BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## HEALTH AND SAFETY INFORMATION

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

## LEGAL NOTICE

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