

# PRODUCT DATA SHEET

# ESSIL 125 ESSIL 124

## 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
- Slower catalyst ESSIL 125 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 124</b> , fast catalyst, colorless

### PHYSICAL PROPERTIES

		Resin (A)	Catalyst (B)
Component		<b>ESSIL 125</b>	<b>ESSIL 124</b>
Viscosity, 25 °C	BROOKFIELD LVT	45,000	30
Density	mPa.s	1.2	1.0
Mixing ratio A : B	g/cm <sup>3</sup>	100	5
		<b>Mixture</b>	
Colour		White	
Aspect		Liquid	
Pot life, 25 °C, 500 g	Gel Timer TECAM	40	
Demolding time, 23 °C	mPa.s	12	

## MECHANICAL PROPERTIES

(approx. values after hardening 7 days / RT)

Shore hardness	ISO 868	A	25
Tensile strength	ISO 37	MPa	2.9
Elongation at break	ISO 37	%	550
Tear strength <i>Unnotched angular specimens</i>	ISO 34	kN/m	19

## PACKAGING UNITS

- |                                  |                       |
|----------------------------------|-----------------------|
| ■ Resin (A), <b>ESSIL 125</b>    | 5 kg / 20 kg / 200 kg |
| ■ Catalyst (B), <b>ESSIL 124</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 catalyst **ESSIL 125** 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, in this case it is preferable to use the mixture ESSIL 124 + ESSIL 125.
- 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 124</b>	12 months
Storage temperature	■ Resin (A), <b>ESSIL 125</b>	15 °C – 25 °C
	■ Catalyst (B), <b>ESSIL 124</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

The information, and, in particular, the recommendations relating to the application and end use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

---

## Contact

---

### SIKA DEUTSCHLAND GMBH

Business Unit Industry  
Stuttgarter Straße 139  
72574 Bad Urach  
Phone: +49 7125 940-7692  
E-Mail: [industry@de.sika.com](mailto:industry@de.sika.com)  
Website: [www.sika.de](http://www.sika.de)

### SIKA AUTOMOTIVE FRANCE S.A.S.

ZI des Béthunes - 15, Rue de l'Équerre  
95310 Saint-Ouen-l'Aumône  
CS 40444  
95005 Cergy Pontoise Cedex - FRANCE  
Phone: +33 1 34 40 34 60  
Fax: +33 1 34 21 97 87  
E-Mail: [advanced.resins@fr.sika.com](mailto:advanced.resins@fr.sika.com)  
Website: [www.sikaadvancedresins.fr](http://www.sikaadvancedresins.fr)

### Sika S.A.U.

Carretera de Fuencarral, 72  
28108 Alcobendas (Madrid) - SPAIN  
Phone: +34 916 572 375  
E-Mail: [pedidos.sika@es.sika.com](mailto:pedidos.sika@es.sika.com)  
Website: [esp.sika.com](http://esp.sika.com)

### Sika Italia S.p.A.

Via Luigi Einaudi 6  
20068 Peschiera Borromeo (MI) - Italy  
Phone: +39 02 54778111  
Fax +39 02 54778 119  
E-Mail: [info@sika.it](mailto:info@sika.it)  
Website: [www.sika.it](http://www.sika.it)

### Sika Limited

Head Office, Watchmead – Welwyn  
Garden City – AL7 1BQ – United Kingdom  
Phone: +44 1707 394444  
E-Mail: [industry-sales@uk.sika.com](mailto:industry-sales@uk.sika.com)  
Website: [www.gbr.sika.com](http://www.gbr.sika.com)

### SIKA AUTOMOTIVE SLOVAKIA S.R.O.

Tovarenska 49  
953 01 Zlate Moravce - SLOVAKIA  
Phone: +421 2 5727 29 33  
Fax: +421 37 3000 087  
E-Mail: [SikaAdvancedResins@sk.sika.com](mailto:SikaAdvancedResins@sk.sika.com)  
Website: [www.sikaadvancedresins.com](http://www.sikaadvancedresins.com)

### Sika Industry – Tooling, Resins and Marine

30800 Stephenson Highway  
Madison Heights, Michigan 48071 - USA  
Phone: +1 248 588 2270  
Fax: +1 248 616 7452  
E-Mail: [advanced.resins@us.sika.com](mailto:advanced.resins@us.sika.com)  
Website: [www.sikaindustry.com](http://www.sikaindustry.com)

### SIKA AUTOMOTIVE EATON RAPIDS, INC.

1611 Hults Drive  
Eaton Rapids, Michigan 48827 - USA  
Phone: +1 517 663 81 91  
Fax: +1 517 663 05 23  
E-Mail: [advanced.resins@us.sika.com](mailto:advanced.resins@us.sika.com)  
Website: [www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)

### SIKA MEXICANA SA de CV

Av. Gustavo Baz #309 Centrum Park  
54060 Tlanepantla Estado de MEXICO  
Phone: +52 442 238 5800  
E-Mail: [roman.octavio@mx.sika.com](mailto:roman.octavio@mx.sika.com)

### SIKA AUTOMOTIVE SHANGHAI CO. LTD.

N°53 Tai Gu Road  
Wai Gao Qiao  
Free Trade Zone, Pudong  
200131 Shanghai - CHINA  
Phone: +86 21 58 68 30 37  
Fax: +86 21 58 68 26 01  
E-Mail: [industry@cn.sika.com](mailto:industry@cn.sika.com)  
Website: [www.sika.cn](http://www.sika.cn)

### Sika Japan Ltd.

Akasaka-K-Tower 7F, 1-2-7, Moto-Akasaka, Minato-ku,  
Tokyo · Tokyo · Tokyo · 107-0051 · Japan  
Phone: +81 3-6433-2101  
Fax: +81 3 6433 2102  
E-Mail: [advanced-resins@jp.sika.com](mailto:advanced-resins@jp.sika.com)  
Website: [www.jpn.sika.com](http://www.jpn.sika.com)

### SIKA INDIA PVT LTD,

Plot No. Pap-V-90/1,  
Chakan Industrial Area,  
Phase-II, Vasuli, Khed, PUNE,  
Maharashtra – 410501  
E-Mail: [info.india@in.sika.com](mailto:info.india@in.sika.com)