

**SikaForce®-7321 L30****Two component semi-flexible potting compound**

## Technical Product Data

Properties	Component A SikaForce®-7321 L30	Component B SikaForce®-7020
Chemical base	Polyols, filled	Isocyanate derivatives
Colour (CQP <sup>1</sup> 001-1)	Beige	Brown
Colour mixed	Beige	
Cure mechanism	Polyaddition	
Density (CQP 006-5)	1.6 g/cm <sup>3</sup> approx.	1.2 g/cm <sup>3</sup> approx.
Density mixed (calculated)	1.5 g/cm <sup>3</sup> approx.	
Solids content	100%	100%
Mixing ratio	by volume 100:40 by weight 100:30	
Viscosity <sup>2</sup> (CQP 538-2)	Brookfield – RVT 5/10 Brookfield – RVT 2/20	10'000 mPa·s approx. 90 mPa·s approx.
Viscosity (mixed)	Brookfield – RVT 4/20 1'700 mPa·s approx.	
Application temperature	15°C – 30°C	
Pot-life <sup>2</sup> (CQP 536-3)	30 min. approx.	
Hardness (CQP 542-3) (CQP 537-2)	80 shore D approx.	
Thermal conductivity (CQP 542-3)	0.563 W/m.K (10°C) / 0.687 W/m.K(60°C)	
Linear coefficient of thermal expansion (ISO 11359) (CQP 542-3)	61.2 ppm/K (-10°C - +25°C) 107.85 ppm/K (+25°C - +80°C)	
Dielectric strength (CQP 542-3) (IEC 60243)	AC: 17.5 kV/mm DC: 64 kV/mm	
Volume resistivity (CQP 542-3) (IEC 60093)	4.5 e <sup>12</sup> Ωm	
Surface resistivity (CQP 542-3) (IEC 60093)	9.0 e <sup>13</sup> Ω	
Tracking resistance (CQP 542-3) (IEC 60587)	2A5.25	
Dissipation factor (CQP 542-3) (IEC 60250)	0.0238 (0.1 kHz) / 0.0126 (1 kHz) / 0.0028 (50 kHz)	
Relative permittivity (CQP 542-3) / Dielectric constant (IEC 60250)	3.6 (0.1 kHz) / 3.8 (1 kHz) / 3.5 (50 kHz)	
Water absorption (CQP 542-3) (after 30 days / 23°C)	0.8% approx.	
Shelf life (storage between 10 and 30°C)	12 months	9 months

<sup>1)</sup> CQP = Corporate Quality Procedure<sup>2)</sup> 23°C / 50% r.h.**Description**

SikaForce®-7321 L30 is the base part of a two component polyurethane potting compound, which is used together with SikaForce®-7020 hardener.

SikaForce®-7321 L30 is manufactured in accordance with ISO 9001 and 14001 quality assurance systems and responsible care program.

**Product Benefits**

- Low coefficient of linear expansion
- High heat conductivity
- Does not contain chemical substances included in the RoHS directive 2002/95/EC

**Areas of Application**

SikaForce®-7321 L30 is used for encapsulation of electric and electronic components with high requirements to adhesion, heat conductivity and low coefficient of linear expansion.

This product is suitable for professional experienced users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



### Cure Mechanism

The curing of SikaForce®-7321 L30 takes place by chemical reaction of the two components.

Higher temperatures speed up the curing process; lower temperatures slow down the curing process.

### Chemical Resistance

In case of expected chemical or thermal exposure, conduct project related testing. Consult our Technical Service for advice.

### Method of Application

#### Mixing

Stir the base part thoroughly before use. Add hardener according to the indicated mixing ratio and mix manually until a homogeneous colour is obtained. Avoid entrapment of air during mixing. The mixed compound has to be used before expiry of the application time.

To ensure constant quality it is recommended to use automatic mixing and dosing equipment. Consult our Technical Service for further information.

#### Items

The items to be embedded must be clean, dry and have a temperature of minimum 20°C to avoid condensation. It is mandatory to test new materials to ensure adequate adhesions.

#### Dosage

To avoid formation of air bubbles, always feed the compound from the lowest part of the item.

### Curing

Normally the items can be handled after approx. 1 hour at 23°C.

However, final curing only takes place after approx. 14 days at 23°C. Higher temperatures reduce the curing time.

### Removal

Uncured SikaForce®-7321 L30 may be removed from tools and equipment with SikaForce®-7260 Cleaner. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

### Storage Conditions

SikaForce®-7321 L30 has to be kept between 10 and 30°C in a dry place. Do not expose to direct sunlight or frost. After opening of the packaging, the content has to be protected against humidity.

Minimum temperature during transportation is -20°C for maximum 7 days.

### Further Information

The following publication is available on request:

- Material Safety Data Sheets

### Value Bases

All technical data stated in this Product Data Sheet 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 Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

### Legal Notes

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.



Further information available at:

[www.sika.ch](http://www.sika.ch)  
[www.sika.com](http://www.sika.com)

Sika Schweiz AG  
Business Unit Industry  
Tüffenwies 16  
CH-8048 Zurich  
Switzerland  
Tel. +41 58 436 40 40  
Fax +41 58 436 55 30

