

SilSo Print 21001

2 part, addition curing silicone elastomer for Pad Printing applications.

Description

Pourable, addition-curing, 2-part silicone rubber that cures at room temperature. This product is mainly used for making silicone printing pads. The cured rubber exhibits excellent physical and electrical properties. Fast and non-shrink cure at room temperature which can be accelerated considerably by the application of heat.

Key Features

- The product can be diluted by adding silicone oil (50 - 300 mPas), which reduces the viscosity and hardness of the material.
- Very good flow and detail reproduction properties due to low viscosity.
- very good mechanical properties, even diluted.
- Ink resistance.

Use and Cure Information

Mixing

Components A and B are mixed at a mass ratio of 1 : 1. The two components are thoroughly mixed either by hand or with an electric or pneumatic stirrer at low speed to avoid air from being dragged in and/or to avoid a temperature increase. Crosslinking is slowed down by reducing the temperature and accelerated by increasing it. The non-tacky time is about 8 - 12 hours.

Inhibition of cure

Great care must be taken when handling and mixing all addition cured silicone elastomer systems, ensuring that all the mixing tools (vessels and spatulas) are clean and constructed in materials which do not interfere with the curing mechanism. The cure of the rubber can be inhibited by the presence of compounds of nitrogen, sulphur, phosphorus and arsenic; organotin catalysts and PVC stabilizers; epoxy resin catalysts and even contact with materials containing certain of these substances e.g. moulding clays, sulphur vulcanised rubbers, condensation cure silicone rubbers, onion and garlic.

These substances may impair or even completely prevent the curing behavior of addition crosslinking silicones typically indicated by tacky surfaces. Therefore, it is absolutely important to check the compatibility in preliminary tests if unknown substrates are used.

Health & Safety

Please observe our safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

Delivery Units

Component A: 5 kg or 25 kg

Component B: 5 kg or 25 kg

Other container sizes upon demand.

Storage

Components A and B of KÖRAFORM PP 18 can be optimally processed for approx. 12 months if stored properly at temperatures below 30 °C and protected from frost in closed original containers.

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Property

Uncured Product

| Property | Test Method | Value |
|--|-----------------|-----------|
| Appearance | | brick-red |
| Color A | | white |
| Cure Type | | addition |
| De-mould Time / Full Cure at 23°C/73°F | | 12 hrs |
| Density A | DIN 53 479 | 1.1 |
| Density B | DIN 53 479 | 1.1 |
| Mix Ratio By Weight | | 1:1 |
| Pot Life mins at 23°C/73°F | | 30 mins |
| Viscosity A | Brookfield HBTD | 12000 cP |
| Viscosity B | Brookfield HBTD | 8000 cP |
| Viscosity Mixed | Brookfield HBTD | 10000 cP |

Cured Product

| | | |
|------------------------|-------------------|--------------------------------|
| Density | DIN 53479 | 1.1 g/cm ³ |
| Elongation at Break | DIN 53 504, S 3 A | 600 % |
| Hardness Shore A | DIN 53 505 | 30 |
| Linear Shrinkage (%) | | < 0.1 % |
| Max Working Temp | | 200 °C / 392 °F |
| Min Working Temp | | -50 °C / -58 °F |
| Tear Resistance (N/mm) | ASTM D 624, Die B | 30 N/mm / 173 ppi |
| Tensile Strength | DIN 53 504, S 3 A | 7 N/mm ² / 1015 psi |

Storage

| | | |
|-------------------------|--|------------------|
| Max Storage Temperature | | 30 °C °C / 86 °F |
| Shelf Life | | 12 mths |

The content set out in the technical data sheet does not contain information upon which you should rely. It is provided for general information purposes only and does not constitute a product specification. You must obtain professional or specialist advice before taking any action based on the information provided in the technical data sheet.

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The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.

CHT Germany GmbH: Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
 Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com / www.cht-silicones.com