# **TECHNICAL DATA SHEET**



# SilSo Replicate 21004 (ALPA-SIL 36202) 2-part silicone moulding rubber

Description	Property	Test Method	Value
This is a pourable 2-part addition cure silicone elastomer system. After mixing parts 'A' and 'B' in the correct proportions, the	Uncured Product Appearance		White
system will cure at ambient temperatures within 24 hours, but the rate of cure can be accelerated by heat. The cured rubber	Color A		White
exhibits excellent physical and electrical properties.	Cure Type		Addition
<ul> <li>Key Features</li> <li>Crosslinks at temperatures as of 23 °C/77°F</li> </ul>	De-mould Time / Full Cure at 23°C/73°F		14 hrs
<ul> <li>Easy mixing of the components</li> </ul>	Mix Ratio By Weight		1:1
Simple processing	Pot Life mins at 23°C/73°F		60 - 90 mins
<ul> <li>Very good alkali stability and therefore excellently suited for concrete moulds</li> </ul>	Tack Free Time / Skin Formation at 23°C/73°F		10 - 12 hr
Application	Viscosity A	Brookfield	25000 cP
Moulds for concrete	Viscosity B	Brookfield	20000 cP
Use and Cure Information			
IMPORTANT:	Cured Product		
The 'A' part of product	Color		White
contains the platinum catalyst; great care should be taken when	Elongation at Break	ISO 37	330 %
using automatic dispensing equipment. Please ensure that it is	Hardness Shore A	DIN 53 505	36
not contaminated by residual hydride containing rubber in the dispensing equipment, as curing will result. If in doubt, it's	Linear Shrinkage (%)		< 0.1 %
advised to thoroughly purge the equipment with a suitable	Tear Resistance (N/mm)	BS ISO 34-1	16 N/mm / 91 ppi
hydrocarbon solvent or silicone fluid.	Tensile Strength	ISO 37	6 N/mm2 / 870 psi
Mixing			
Both the 'A' and 'B' parts should be well stirred to ensure the material is uniform and any settlement of the fillers have been remixed. Place the required amount of 'A' and 'B' parts by weight	Storage Max Storage Temperature Shelf Life		30 °C / 86 °F 12 mths

at the mix ratio shown opposite, in a clean plastic or metal container of approximately 3 times their volume, and mix until the colour of the mixture is uniform. For best results, we recommend degassing. Degas by intermittent evacuation, the larger volume of the mixing vessel helps prevent overflow during this operation. In case of automatic dispensing with static mixing head, the two components should be degassed before processing. Recommended vacuum conditions are 30-50 mbar intermittently over 5-10 minutes. Cast the mixture either by gravity or pressure injection. In order to achieve optimum performance, the same "A" and "B" side lot number should be used.

## 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.

#### **Curing Conditions**

The data offers a guide to the rate of cure at various temperatures, mixing of the components at temperatures between 15 and 25°C is recommended to ensure adequate pot life for degassing and handling. The pot life can be extended to several hours by chilling the components before mixing.

### Health & Safety

Safety Data Sheets available on request.

#### Packaging

CHT Moulding Rubbers are available in a variety packaging including bulk containers. Please contact our sales department for more information.

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