# **TECHNICAL DATA SHEET**



# SilSo Replicate 21011 (ALPA-SIL MF 10) 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		Blue
system will cure at ambient temperatures within 24 hours, but the rate of cure can be accelerated by heat. The cured rubber	Color A		Translucent
exhibits excellent physical and electrical properties.	Cure Type		Addition
<ul> <li>Key Features</li> <li>Crosslinks at temperatures &gt; 23 °C/77°F</li> </ul>	De-mould Time / Full Cure at 23°C/73°F		0.2 hrs
<ul> <li>High flowability</li> </ul>	Density A	BS ISO 2781	1.02
<ul> <li>Easy mixing of the components</li> </ul>	Density B	BS ISO 2781	1.02
<ul> <li>Outstanding detail reproduction</li> </ul>	Mix Ratio By Weight		1:1
Application	Pot Life mins at 23°C/73°F		4.5 mins
Application in the dental field	Viscosity A	Brookfield	1600 cP
Use and Cure Information	Viscosity B	Brookfield	1600 cP
IMPORTANT:			
The 'A' part of product	Cured Product		
contains the platinum catalyst; great care should be taken when	Color		Blue
using automatic dispensing equipment. Please ensure that it is	Density	BS ISO 2781	1.02 g/cm3
not contaminated by residual hydride containing rubber in the dispensing equipment, as curing will result. If in doubt, it's	Elongation at Break	ISO 37	210 %
advised to thoroughly purge the equipment with a suitable	Hardness Shore A	DIN 53 505	12
hydrocarbon solvent or silicone fluid.	Linear Shrinkage (%)		< 0.1 %
Mixing	Tensile Strength	ISO 37	1.3 N/mm2 / 189 psi
Both the 'A' and 'B' parts should be well stirred to ensure the material is uniform and any settlement of the fillers have been	Storage		

remixed. Place the required amount of 'A' and 'B' parts by weight at the mix ratio shown opposite, in a clean plastic or metal container of approximately 3 times their volume, and mix until the

StorageMax Storage Temperature30Shelf Life12

30 °C / 86 °F 12 mths

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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