Schouten Group
SynTec

TDS / ENGLISH
Condensation cured silicone

SG C-SIL 10/20/30

Technical Data Sheet

1. DESCRIPTION AND MAIN FEATURES

SG C - Sil is an poly-condensation, tin cured, RTV 2 silicon rubber that vulcanizes at room temperature. The C silicones are low viscosity, medium Shore A hardness (10, 20 and 30) and high tear strength.

Main characteristics
- Two-component pourable condensation silicone that polymerizes at room temperature
- High shore A hardness (approx. 30)
- High tear strength
- Low dimensional variation

2. MAIN APPLICATION SECTORS

Industrial (realization of silicone mould / duplications / restorative). The product stays in contact with non – aggressive materials. The product does not suffer inhibition problems with the main used products like clay, plaster, cement, etc.

3. DOSAGE AND MIXING

The product is composed by a BASE component (white COLOUR) and a CATALYST component (transparent oil COLOUR). Mix energically the mass (mixing ratio see technical) till to obtain an homogeneous colour. The hardening happens in approximately 24 hours. After 24 hours the product is hardened.

4. INSTRUCTION FOR USE

We alwaus recommend a test before usage of any casting material.

The percent of catalyst to mix depends on the catalyst. The exact proportion must be respected to obtain the correct hardening of the product. We recommend 5% catalyst.Take both components and shake / stirr before use to homogenize each component prior mixing. Base comp. is White and the Catalystcoloured transparent oil. The mix ration must be respected in order to ensure the final characteristics of the silicone product. The mix ratio is 100 +5% This means 1 kg base needs 50 gram catalyst. DO NOT exceed the recommended ratio for the curing agent.

It is possible to use LESS curing agent (3-4%) than the recommended ratio (5%), however keep in mind that although dimensional variation will be lower, setting time will increase (you can also add up to 7% for faster working/curing time, the final characteristics can be change).

Mix energetically untill you have a blended white homogeneous white color. Once both components mixed well, it is ready for casting. We recommend pouring the silicone from 30 cm into the mould and into the lowest position.

The mould can be demoulded after 24 hours but will be complete hardneing in 72 hours. The working time and curing time based on standard RTV temperature of 23°C. The setting time starts when both components starts mixing.

The working time and setting time are reduced if the temperature exceeds 23°C (e.g. if the temperature is 40°C, the working time and setting time are approximately cut in half). If the temperature is less than 23°C, the working time and setting time increase considerably. Cured silicone properties are guaranteed within temperatures ranging from a minimum temperature of - 40 °C to a maximum temperature of +200°C.

Prepare everything well. Before you start, make sure everything is ready and that you know the correct materials and quantity and have it ready to process. Work cleanly and step by step. Weigh the quantities properly and adhere to the recommended mixing ratio. use the correct and clean tools. At least maintain the curing time as prescribed. If you have any questions, please always contact our customer service.

We recommend to do a material test if you do not sure there will be inhibition or not. Just take a small piece of your object material or object. cast a small piece of silicone on the surface and check the curing after 24 hours.

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5. CHEMICAL AND PHYSICAL CHARACTERISTICS

Properties	SG C-SIL 10	SG C-SIL 20	SG C-SIL 30
Material	White Liquid	White Liquid	White Liquid
Base Viscosity	50.000 cP	40.000 cP	60.000 cP
Mixing ratio B + Catalyst	100 + 5%	100 + 5%	100 + 5%
Density	1.17 g/cc	1.22 g/cc	1.26 g/cc
Working time (@ 23 °C)*	> 60 minutes	> 90 minutes	> 50 minutes
Setting Time (@ 23 °C)*	< 24 hours	< 24 hours	< 24 hours
Hardness after 72h	10± 2 shA	20± 2 shA	27± 2 shA
Tear Resistance	20 N/mm	20 N/mm	22 N/mm
Strength Resistance	3 N/mm2	3 N/mm2	3,5 N/mm2
Elongation at break	650%	350%	280%
Tensile strength	3 N/mm2 / 360 psi	3 N/mm2 / 360 psi	30 N/mm2 / 360 psi
Dimensional variation (48 h / 7 days)	0,51% / 0.6%	0,51% / 0.6%	0,51% / 0.6%

(*) The working time and setting time depends significantly of the air-humidity. You can add 6-7% curing agent and get faster working time.

6. AVAILABLE ADDITIVES

For brush-on moulds or thicken the sililcone please use the silicone thickner for condensation silicone art. no. 508463.

7. AVAILABLE PACKAGING

Packages:

Set 210 KG - 200 kg base + 10 kg curing agent (drum packaging + canister)
Set 21 KG - 20 kg base + 1kg curing agent (bucket + botle)
Set 5,25 KG - 5 kg base+ 0,25kg curing agent (bucket + botle)

We can supply in special request or small qty for resellers.

8. SHELF LIFE

SG C-Sil is guaranteed for a period of 12 months if conserved correctly between 5° - 27°C (41° - 80°F).
Storage beyond the date specified on the label does not necessary mean that the product is no longer usable. In this case, however, the properties required for the intended use must be checked out for quality assurance reasons.

9. SAFETY DATA SHEETS

Before handling the product, read the safety data sheet and make sure to get all the information required for safe use. Please contact us for the msds sheets of both components.

10. IMPORTANT OBSERVATIONS

The advice given verbally, in writing or through demonstrations on the use of the products are based on our knowledge. The use and application of the product by the user lie beyond the control of the company and are therefore the user's own responsibility.