

RECKLI[®] Si-Compound 20

RECKLI Si-Compound 20

Product 03202

Edition 10/16

Silicone moulding material for superior requirements

PROPERTIES

RECKLI Si-Compound 20 is a castable two-component silicone rubber with very high tear resistance and elongation at break, cold curing by polycondensation and self-releasing. On mouldings even finest surface contours and textures are reproduced. For the application on a vertical or overhead area the material can be adjusted pasty by RECKLI Si-Thickener Liquid K (0,5 – 1,5 %).

APPLICATIONS

RECKLI Si-Compound 20 is used for making highly tearproof, elastic moulds for the manufacture of casts or copies out of gypsum, mortar, concrete, resins or resin formulations. It is particularly suitable for complex moulds, even in cases of undercuts or higher structure depth.

Attention!

Moulds out of RECKLI two-component silicones are not fully suitable for casting polyester- or PMMA-resins. These applications strictly demand a preliminary test.

TECHNICAL DATA

property	value	method
hardener:	Si-Hardener Type N	
colour of base component:	beige	
colour of hardener	colourless, clear	
odour	weak	
mixing ratio (base : hardener):	10 : 1	(according to weight)
workable temperature:	+10 °C – +30 °C	
viscosity of base component:	35000 mPa·s	ISO 2555
viscosity of mixture:	18000 mPa·s	ISO 2555
pot life (200-g-mixture at +21 °C):	60 – 90 min	
earliest demoulding (at +21 °C):	30 h	
specific weight:	1,24 g/cm ³	
hardness:	20 Shore A	DIN 53505
tensile strength:	3,4 N/mm ²	DIN 53504-S2
elongation at break:	400 %	DIN 53504-S2
tear resistance:	19 N/mm	ASTM D 624-B
heat resistance (dry heat):	approx. +160 °C	
linear shrinkage:	0,5 – 0,8 %	

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These data are typical guide values. They are not destined for the generation of specifications.

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SURFACE PREPARATION

The model surface must be clean. Absorbing surfaces should preferably be sealed to avoid contamination by silicone oil and to ensure the easiness of the subsequent demoulding. For this, RECKLI PUR-Sealant can be used if the surface is solvent-resistant. Otherwise, especially if the surface has to be recovered in the original state, RECKLI Si-Stripping Lacquer can be applied and removed with water along with all residues after completing the moulding works. Before continuing, the sealant has to dry completely. Further measures are usually unnecessary due to the self-releasing effect. However, certain critical substrates, in particular glass, freshly milled metal or wood as well as silicone itself, must be covered with RECKLI Mould Wax. When applying silicone in several layers, even after the surface is completely cured, the adhesion of the following layer to the substrate is perfect.

PROCESSING

Before processing, the base component has to be stirred up thoroughly. Add the hardener (B) to the base component (A) and mix them homogenously. Transfer the mixture into a second receptacle and stir it up again. Thereby the incorporation of larger amounts of air should be avoided. Once mixed the processing of the material must be completed within the pot life (60 – 90 minutes). The shortest demoulding time is 30 hours.

For the application in a thixotropic state add RECKLI Thickener Liquid K after mixing the base component and the hardener to adjust the required consistency. The recommended dosage is 0,5 – 1,5 % (by weight). The thickener accelerates the curing process.

METHOD OF PROCESSING

Casting, painting or trowelling.

CLEANING OF EQUIPMENT

For the cleaning of the tools and the equipment, use dry, absorbing cloths, if necessary RECKLI EK-PU Thinner in addition. Immersion in solvents is not sufficient. When cured, the material can be removed from the tools due to the self-releasing effect.

SPECIAL REMARKS

Attention!

RECKLI Si-Compound 20 needs humidity for proper hardening. The water content is sufficiently set when leaving our factory. If the containers are not closed airtight

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or even let standing open, the added quantity of water can volatilise, thus resulting in prolonged reaction time or inaccurate curing. The typical effect is substantially sticky material. In such cases, 1 – 2 g of water per 1 kg silicone are to be mixed into the base component and all allowed to rest for at least 24 hours.

On the contrary, if the top of the silicone mould remains sticky when exposed to air, it is a result of too low air moisture in the working place. In this case, addition of water to the base component is not advisable. Suitable measures (e. g. evaporators) should be taken instead to increase the humidity of the air. About 50 % relative humidity can be estimated as ideal.

To ensure dimensional accuracy and maximum life period, moulds made of RECKLI Si-Compound 20 must be stored under admittance of air on non-absorbent or sealed material, best in their supporting mould. Each contact with other silicone products, either within the same or with other moulds as well, must strictly be avoided.

PACKAGING SIZES

double drums: 5 kg | double cans: 1 kg.

The hardener is enclosed in the lid.

STORAGE

Store in a dry place at room temperature. RECKLI Si-Compound 20 is storable for 6 months from delivery when kept in the closed original packaging at about 18 °C. Opened drums must be closed airtight right after use.

GENERAL INFORMATION

For further information please also see:

“General advice for making moulds and models using RECKLI two-component silicones”.

SAFETY

Protect skin and eyes from material splashes. Please consult the relevant safety data sheet and attend to the indications on the label of the package regarding the Dangerous Goods Regulation. This pamphlet is intended solely as an application directive. It does not claim to be binding and valid for all modes of application. A preliminary test under operation conditions is highly recommended.

This pamphlet replaces all previously published pamphlets concerning RECKLI Si-Compound 20, stating them as no longer being valid.

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