

## RECKLI® Si-Compound 21AV

**Silicone moulding material, almost shrinkage-free**

RECKLI Si-Compound 21AV

Product 03236

Edition 10/16

### PROPERTIES

RECKLI Si-Compound 21AV is a castable two-component silicone rubber with high tear resistance and elongation at break, cold curing by polyaddition 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 with RECKLI Si-Thickener Liquid AV (0,1 – 1,0 %). At elevated temperatures, the curing period is significantly shortened. Moulds out of RECKLI Si-Compound 21AV are storable over long periods without decrease of mechanical properties.

### APPLICATIONS

RECKLI Si-Compound 21AV is used for making elastic moulds for the manufacture of casts or copies out of gypsum, mortar, concrete, resins or resin formulations. It is particularly suitable for applications demanding high dimensional accuracy.

#### 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:	for Si-Compound 21AV, 31AV	
colour of base component:	beige	
colour of hardener	translucent	
odour	odourless	
mixing ratio (base : hardener):	10 : 1	(according to weight)
workable temperature:	+10 °C – +30 °C	
viscosity of base component:	15000 mPa·s	ISO 2555
viscosity of mixture:	6000 mPa·s	ISO 2555
pot life (200-g-mixture at +21 °C):	90 – 120 min	
earliest demoulding (at +21 °C):	24 h	
specific weight:	1,30 g/cm <sup>3</sup>	
hardness:	21 Shore A	DIN 53505
tensile strength:	2,1 N/mm <sup>2</sup>	DIN 53504-S2
elongation at break:	300 %	DIN 53504-S2
tear resistance:	13 N/mm	ASTM D 624-B
heat resistance (dry heat):	approx. +160 °C	

RECKLI GmbH

Gewerkenstraße 9a

D-44628 Herne

Tel +49 2323 1706-0

Fax +49 2323 1706-50

info@reckli.de

www.reckli.de

linear shrinkage: 0,1 – 0,2 %

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.

## **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 24 hours.

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

## **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**

To ensure dimensional accuracy and maximum life period, moulds made of RECKLI Si-Compound 21AV must be stored under admittance of air on non-absorbent or sealed material, best in their supporting mould. Each contact with other silicone

RECKLI GmbH  
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D-44628 Herne  
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products, either within the same or with other moulds as well, must strictly be avoided.

### **Attention!**

RECKLI Si-Compound 21AV can not be used on substrates containing sulphur compounds, heavy-metal compounds or amines (e.g.: rubber, condensation-cured silicone, polyurethanes, various natural materials). Contact with such substrates suppresses (inhibits) the crosslinking reaction. Therefore all materials used for the manufacture or the treatment of the models in question must be selected with all due diligence. If the suitability of the model material is uncertain, a preliminary test is essential.

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## **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 21AV 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 21AV, stating them as no longer being valid.