# TECHNICAL DATA SHEET



# **ALPA-SIL 18101** 2 part Silicone Moulding Rubber

Descri	ntion

Notch-resistant, condensation crosslinking silicone filling compound particularly for casting polyester resin.

## **Key Features**

- Good flowing behaviour
- Very good elastic properties
- Outstanding stability to polyester resins Suitable for block moulds and skin moulds with strong undercuts

### **Application**

casting polyester resin, printing pads, block moulds and skin moulds with strong undercuts

## **Use and Cure Information**

#### Stir up components A and B well before processing!

KÖRAFORM B 132 is added to ALPA-SIL 18101 at a mixing ratio of 100: 3 according to weight and mixed with the spatula or stirring unit until the mass is homogeneous. With this mixing process, the potlife starts by which time ALPA-SIL 18101 has to be processed (casting or painting with the brush). Demoulding can be done after 18 hours. For an absolutely bubble-free vulcanisate the mixed silicone must be degassed using vacuum prior to the casting process (max. 5 minutes at 10 - 20 mbar). When moulding difficult substrates such as glass, the separation behaviour has to be verified in own tests and perhaps by adding a silicone-free separation agent.

#### Solvents and cleaning agents

For removing fresh mass KÖRASOLV GL must be applied. Residues in the stirring or casting vessel can be easily removed by letting them cure in order to scrape them off afterwards.

Property	Test Method	Value
Uncured Product		
Appearance		Translucent
Color A		Translucent
Cure Type		Condensation
De-mould Time / Full Cure at 23°C/73°F		18 h hrs
Density A	DIN 53 479	1.09
Density B	DIN 53 479	1.04
Mix Ratio By Weight		100:3
Pot Life mins at 23°C/73°F		100 mins
Viscosity A	Brookfield HBTD	30000 cP
Viscosity B	Brookfield HBTD	20 cP
Viscosity Mixed	Brookfield HBTD	29000 cP

#### **Cured Product**

## Standard climate DIN 50 014 - 23/50-2. Vulcanizate tested after 7 days at room temperature

Color		Transparent
Elongation at Break	DIN 53 504, S 3 A	350 %
Hardness Shore A	DIN 53 505	18
Linear Shrinkage (%)		0.5 %
Tear Resistance (N/mm)	ASTM D 624, Die B	17 N/mm / 98 ppi
Tensile Strength	DIN 53 504, S 3 A	3,5 N/mm2 / 435 psi

### **Storage**

Max Storage Temperature	30 °C / 86 °F
Min Storage Temperature	5 °C / 41 °F
Shelf Life	9 mths

	ALPA-SIL 18101	KÖRAFORM B 132		
	Component A	Component B		
Colour	transparent	colourless/yellowish		
Viscosity	30,000	20	mPa·s	Brookfield HBTD <sup>1</sup> )
Density	1.09	1.04	g/cm <sup>3</sup>	DIN 53 479 1)
	Mi	ixture		
Mixing ratio	100 : 3		according to weight	
Viscosity	29,000		mPa·s	Brookfield HBTD <sup>1</sup> )
Potlife	100		minutes	
Demouldable after	18		hours	
	Vul	canisate		
Hardness Shore A	18			DIN 53 505 <sup>2</sup> )
Tear strength	3.5		N/mm <sup>2</sup>	DIN 53 504 S 3 A 2)
Elongation at break	350		%	DIN 53 504 S 3 A 2)
Tear propagation				
resistance	17		N/mm	ASTM D 624 'Form B2)
Linear shrinking	0.5		%	after 7 days

<sup>1 =</sup> Measured under standard climate DIN 50 014-23/50-2

#### Storage

ALPA-SIL 18101 can be optimally processed for at least nine months if stored between 5°C and 30°C in tightly closed containers. KOERFOARM B 132 can be optimally processed for at least six months if stored between 5 °C and 30 °C in tightly closed containers.

## **Health & Safety**

#### Safety

Please observe our EC safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

## **Delivery units**

ALPA-SIL 18101: 22 kg hobbocks KÖRAFORM B 132: 0.5 kg PET bottles

Revision Date 27 Mar 2024

Revision No

**Download Date** 16 Apr 2024

<sup>&</sup>lt;sup>2</sup> = Vulcanisate, measured after 7 days of storage at room temperature