KLEIBERIT 549.1

2C-PUR-Moulding Compound

Areas of use

- Manufacture of air filter end caps and other compact sealing lips, also for dust filter elements in the food industry

Advantages

- Permanently elastic, high tear strength and expansion
- Efficient processing using mixing and dosing plant

Properties of the moulding compound

Two-component system, cold setting

Base:	Polyurethane
Component A:	549.1
Component B:	549.3
Specific weight:	Comp. A: 1.09 ± 0.02 g/cm³
	Comp. B: 1.21 ± 0.02 g/cm³
Viscosity at 20°C	
- Brookfield RVT:	Comp. A = 2,500 ± 500 mPa·s
	Comp. B = 160 ± 30 mPa·s
Mixing ratio:	Component. A : Component B = 100 : 25 parts by weight
Gelling time (100 g in a beaker):	
	2 - 3 minutes
Consistency:	flows well
Colour:	white
Hardness (Shore A):	
(DIN ISO 7619-1):	66 ± 5

Identification: see our safety data sheet

Setting properties

(6 mm layer thickness and a mould temperature of approx. 40°C)

Positioning time for filter element: approx. 30 seconds
Removable from mould: after 8 - 10 minutes
Moulded form stable: after 12-15 minutes

Increase in hardness (Shore A):

after 1 hour:	61 ± 5
after 24 hours:	64 ± 5
after 7 days:	66 ± 5
after warm storage:	65 ± 5 (48 hours at 110°C)
at -20°C:	72 ± 5

Please allow for lineal and physical shrinkage when constructing moulds.
Cause: Cooling of the reaction and the moulded form to room temperature.
Please perform your own tests beforehand.

Mechanical properties of the hardened moulding compound

1. Tensile strength and elongation at break acc. to DIN ISO 527

	Tensile strength [N/mm²]	**Elongation at break [%]**
Initial condition:	approx. 6	approx. 300
After 48 hours storage at 110° C:	approx. 6.5	approx. 350
After hydrolysis treatment: (10 days storage in distilled water at 80°C)	approx. 5	approx. 500

2. Compression set acc. to DIN ISO 815

test specimen pressed by 30%
after 72 hours at 20°C: approx. 20%

3. Tear growth resistance (DIN ISO 34-1, method A)

In initial condition: approx. 7 N/mm
after 48 hours at 110° C: approx. 8 N/mm

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Processing

The moulding compound is processed using a 2-component mixing and dosing plant. Detailed information of manufacturers of such plant is available upon request.
The most favourable working temperature is between 20-25°C. Higher temperatures will accelerate, and lower temperatures will reduce the speed of the setting process.
Homogenise component A before use.
For this purpose, a drum tumbling plant should be used for closed drums and an effective stirring device for the contents of drums which are open.
A measured quantity of mixed material is poured into the mould, which has been pre-coated with a separating agent. To ensure uniform and rapid hardening, it is recommended that the mould be warmed to approx. 40°C.
The filter element must be put into position within 60 seconds.
The cast form can be removed after approx. 8 -10 minutes.

Cleaning

For cleaning purposes and to flush out the mixing and dosing plant, we recommend the use of **KLEIBERIT 820.0**.
Please observe the instructions supplied by the manufacturers of the plant used.

Container sizes

KLEIBERIT 549.1, Cp. A:	
Steel drum	200 kg net
Container	1,000 kg net
KLEIBERIT 549.3, Cp. B:	
Steel drum	240 kg net
KLEIBERIT 820.0:	
Tin can	22 kg net

Additional packaging available upon request.

Storage

KLEIBERIT 549.1 (Component A) can be stored in original closed containers for approx. 9 months. Protect from humidity!
KLEIBERIT 549.3 (Component B) is **sensitive to cold and frost**. Transport and storage temperature must be kept **above +15°C**. When kept dry, component B can be stored in the original closed containers for approx. 6 months.
Optimal storage temperature is 20-25°C. The contents of opened containers should by used as quickly as possible.

Version 17/11/21 ga; replaces previous versions

Waste Disposal
Disposal of contents and/or containers should comply with all applicable federal, state and local regulations.
Our containers are made of recyclable material.

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