

KLEIBERIT 545.1.65

2C PUR moulding compound

Fields of application

- manufacture of end caps for air filters and other compact sealing lips

Advantages

- permanent elasticity, high resistance to tearing and expansion
- efficient application by means of mixing and dosing equipment

Properties of the moulding compound

Two-component system, solvent-free, cold curing

Base: polyurethane
 Comp. A: KLEIBERIT 545.1.65
 Comp. B: KLEIBERIT 545.2.20

Mixing ratio: Comp. A: comp. B =
 5 : 1 by weight
 4.3 : 1 by volume

Specific gravity: Comp. A = $1.37 \pm 0.02 \text{ g/cm}^3$
 Comp. B = $1.17 \pm 0.02 \text{ g/cm}^3$

Colour: blue

Viscosity at 20°C

Brookfield RVT, 20 rpm: Comp. A: $7,500 \pm 1,500 \text{ mPa s}$
 Comp. B: $150 \pm 100 \text{ mPa s}$

Consistency: flows well

Gel time: approx. 3 min
 (100 g hand mixed in cup)

Identification: See safety data sheet

Setting properties

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

Insertion time for filter bag:

approx. 60 sec
 Removable: after approx. 15 min
 Form stability: after approx. 20 min

Hardness (Shore A):

according to DIN ISO 48-4:2021-02,
 Measured value reading after every 3 seconds at 20°C

after 60 min: approx. 45
 after 24 hrs: 53 ± 3
 after 7 days: 61 ± 5
 after heat storage: 55 ± 5 (48 hours 110°C)

When constructing moulds, please allow for lineal and physical shrinkage.

Cause: Cooling of the reaction and mould to room temperature.

Due to the above, perform the necessary tests as early as possible.

Properties of the moulding compound (final condition)

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

	Tensile strength (N/mm ²)	Elongation at break (%)
Initial condition:	approx. 4,5	approx. 400
after 48 hours		
Storage at 110° C:	approx. 4,2	approx. 400
after hydrolysis test: (10 days storage in distilled water at 80° C)	approx. 4,2	approx. 400

Compression deformation residual acc. to PV309

compressed 25 %
 after 72 hours at 20° C: approx. 20%
 after 24 hours at 70° C: approx. 40%

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Application

The moulding compound is processed with 2-component mixing and dosing plants. We would be pleased to supply information upon request, regarding the manufacturers of such plant.

The most favourable working temperature range 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 the purposes of homogenising, a tumbling unit is suitable for closed containers, and an efficient stirring device is suitable for containers which have already been opened. The mould is coated with a release agent, and a measured amount of the mixed material poured into the mould. In order to achieve even and rapid hardening, it is recommended that the mould be kept at a temperature of 40°C. The filter bag must be inserted within 30 sec.

Moulded parts can be removed after 15 min, however 20 min is recommended (see "Setting properties").

Important!

When mixing by hand (production of samples), the two components must be rapidly and thoroughly mixed together. Once mixed, pour immediately.

Cleaning

We recommend to use KLEIBERIT 820.0 for cleaning tools and applicators, and to flush out the mixing and dosing appliance. Ensure that any recommendations made by the manufacturers of the equipment used are complied with.

Packaging

KLEIBERIT 545.1.65, Comp. A:

metal bucket,	5 kg net
plastic canister,	30 kg net
metal drum,	200 kg net

KLEIBERIT 545..2.20, Comp. B:

plastic container	6 kg net
metal can,	35 kg net
metal drum,	250 kg net

Cleaner

KLEIBERIT 820.0:

metal can, 22 kg net

Additional packaging sizes available upon request.

Storage

The storage temperature is ideally between 15-25°C. Both components must be protected from humidity and be stored in tightly closed containers.

Component A is hygroscopic, therefore the quality of the mixture can be affected by the absorption of moisture (bubbles or foam will appear).

Component B should not be stored or transported under 0°C.

Component A must be thoroughly stirred before use.

Component B will form a skin when exposed to moisture.

Both components can be stored for at least 9 months at room temperature, when stored in tightly closed original factory containers. The contents of containers which have been opened must be used up as soon as possible.

Version 03.05.22 Iz; replaces previous version

Adhesive and Waste Disposal

Waste Code 080410 Component A
Waste Code 080501 Component B

Our containers are made of recyclable material. Well drained containers can be recycled.

Service

Our application department may be consulted at any time without obligation. The statements made herein are based on our experience gained to date. They are to be considered as information without obligation. Please test and establish for yourself the suitability of our products for your particular purposes. No liability exceeding the value of our product can be derived from the foregoing statements. This also applies to the technical consultancy service which is rendered free of charge and without obligation.