

KLEIBERIT 522.5

Air Filter Foam

Field of application

- Manufacture of air filters when using closed moulds.

Advantages

- Based on the requirements of Volkswagen (VW) Standards TL 848
- Good flow properties
- Fine-pored structure
- Quick setting time for removal from mould

Properties of the foam

Two component system, solvent free

Base: polyurethane

Comp. A: Filter Foam 522.5

Comp. B: Filter Foam 522.2

Mixing ratio:

Comp. A : Comp. B 100 : 36 parts by weight

Specific weight:

Comp. A 1.04 ± 0.02 g/cm³

Comp. B 1.22 ± 0.02 g/cm³

Viscosity at 20°C/ Brookfield RVT

spindle no. 3 at 20 rpm:

Comp. A 1,500 ± 500 mPa s

spindle no. 1 at 20 rpm:

Comp. B 45 ± 15 mPa s

Colour of the mixture: orange

Reaction time (50 g in a laboratory cup, tack free surface): 80 ± 10 seconds

Process times:

Time for inserting approx. 20 seconds
Time for removal approx. 7 minutes

Identification: see our safety data sheet

Physical properties of the foam

Apparent density, in free-foamed condition, approx. 300 kg/m³

The following values were obtained from a test object with an apparent density of approx. 400 kg/m³ (foamed in a closed mould).

Tensile strength according to DIN EN ISO 1798

in initial state > 0.8 N/mm²

following hydrolytic storage > 0.8 N/mm²

Elongation at tear according to DIN EN ISO 1798

Initial state > 100 %

following hydrolytic storage > 100 %

Hydrolysis storage: test object stored in distilled water at 80°C for a 10 day period

Determination of permanent set according to DIN EN ISO 1856

after 40% deformation, 30 minutes after discharge

72 hours storage at 23°C: < 20 %

22 hours storage at 70°C: < 20 %

Hardness, Shore A as per DIN 53 505: 31 ± 5

Compression stress as per DIN EN ISO 3386: 25 ± 10 N/cm²

Application techniques

Homogenise component A in the container before use.

This moulding compound with foaming effect is processed using a two-part mixing and dosing plant fitted with a dynamic mixing head. The storage container for component A must be fitted with a stirring device and an air supply at the base. Alternatively, a two-component plant fitted with an aeration unit and a facility for the recirculation of components A + B can also be used. We would be pleased to supply you with information regarding manufacturers of such plants upon request.

In order to obtain a fine-pored and uniform structure, component A must be aerated with 3-5% (max.) atomised air. This aeration procedure must be performed every time the storage tank for component A is refilled, or following a prolonged interruption of work. The degree of aeration is determined by measuring the specific gravity with a Pyknometer.

KLEIBERIT 522.5

Dry air only may be used for aeration, and for the compressed air supply for cleaning and transferral purposes to and from the storage tank. In this case, 'dry air' is understood to be air which has been dried by means of a refrigeration dryer or an absorption dryer.

Maximum water content of the compressed air used = 5 g/m³ at 6 bar pressure.

If the water content (fluid or gaseous) is too high, it will alter the product!

The most favourable working temperature range is between 20-25°C. Higher temperatures will accelerate, and lower temperatures will reduce the time required for setting.

The surface of the mould must be free of any residues and must always be finely sprayed with a separating agent before being used each time. To ensure uniform setting, it is recommended that the mould be pre-warmed to 40-45°C. The mould is filled evenly with the foam and the filter inserted immediately afterwards. If a closed mould system being used, replace the cover.

Cleaning

We recommend the use of KLEIBERIT Cleaner 820.0 toluene-free to clean tools and to flush out the mixing and dosing plant. Any recommendations made by the manufacturers of the equipment used must be complied with.

Packaging

KLEIBERIT Air filter Foam 522.5, Comp. A
metal pail, 30 kg net

KLEIBERIT Air filter Foam 522.2, Comp. B
plastic canister, 10 kg net
metal can, 35 kg net

KLEIBERIT Cleaner 820.0 toluene-free:
metal can, 22 kg net

Additional packaging available upon request.

Storage

KLEIBERIT Air Filter Moulding Compound 522.5, Comp. A, and KLEIBERIT Air Filter Moulding Compound 522.2, Comp. B, can be stored in the original factory sealed containers for approx. 12 months.

Do not store comp. B below +10°C!
Protect from moisture and humidity.

Version 08/11/2021 Iz, 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.

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.