Klübertop TP 29-1310 N A-B Komp. A

Water-miscible two-component bounded coating for elastomers

Benefits for your application

- **Water-miscible two-component blonded coating for elastomers**
- **Soft, visually appealing surface**
- **For coating O-rings, sponge and conventional rubber profiles**
- **For offline coating**
- **High elasticity**
- **Good abrasion resistance**
- **Good adhesion**
- **Contains UV-indicator (excitation at 300 - 400 nm)**

Description

Klübertop TP 29-1310 N A/B is a black, two-component bonded coating for elastomers. As it is cross-linking at ambient temperature, it is particularly suitable for offline application on sponge and conventional rubber. Owing to its soft surface, Klübertop TP 29-1310 N A/B can be used in all areas where an appealing appearance is just as important as reliable operation.

One of the main advantages of this product is its good adhesion on materials like EPDM and other elastomers.

Klübertop TP 29-1310 N A/B contains selected solid lubricants and an organic, water-miscible binding agent and is free of co-solvent.

Klübertop TP 28-1311, a one-component heat-setting coating with the same properties, is available for on-line processes.

Application

Klübertop TP 29-1310 N A/B was developed for the offline coating of unflocked automotive seals made of sponge or conventional rubber, including:

- door seals
- folding top seals
- trunk seals

Application notes

Klübertop TP 29-1310 N A/B can be applied by spraying or by brush.

Spraying:

Feed pressure: approx. 2 bar

Nozzle diameter: 0.5 mm to 0.8 mm

The recommended coating thickness is approx. 7 to 15 µm.

As component B (hardener) use Klübertop TH 1 component B.

A primer should be used for all cases where improved adhesion is required.

Ensure that only oil and water-free compressed air is used.

Protect from frost and direct heat.

Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klübertop TP 29-1310 N A/B Komp. A
Can 1 l	+
Bucket 15 l	+

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Product data	Klübertop TP 29-1310 N A/B Komp. A
Article number	099224
Colour space	black
Density, DIN EN ISO 2811, at 20 °C	approx. 1.12 g/cm³
Runout time, DIN EN ISO 2431, with flow cups, 4 mm nozzle	approx. 25 s
Yield with a tribo-film thickness of 10 micrometer	approx. 27.0 m²/l
Chemical resistance to FAM test fuel, DIN 51604, duration of exposure 10 min.	resistant
Chemical resistance to ethanol/water (1:1), duration of exposure 10 min	resistant
Chemical resistance to isopropanol, duration of exposure 10 min	resistant
Chemical resistance to window cleaner (commercial product), duration of exposure 10 min	resistant
Chemical resistance to white spirit (145/200), duration of exposure 10 min	resistant
Drying time, at approx. 20 °C, completely hardened	approx. 24 h
Drying time, at approx. 100 °C, dry to the touch	approx. 5 min
Mixing ratio of components (standard mixture)	100:4
"Low-temperature stability [Mandrel bending test acc. to DIN EN ISO 1519 at the indicated temperature]"	-40 °C
"High-temperature stability [Flexibility (tensile strength acc. to DIN 53504) and adhesion of coating (cross cut acc. to DIN EN ISO 2409) after storage at the indicated temperature]"	180 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	9 months

Processing instructions for Klübertop TP 29-1310 A/B

Application method: Spraying

(Information on other application methods is available on request.)

Klübertop TP 29-1310 N A/B is a two-component system!

A mixing ratio of A:B = 100:4 by weight is MANDATORY.

As component B (hardener) use Klübertop TH 01 component B.

Please follow these instructions when processing Klübertop TP 29-1310 A/B:

- Stir component A well before use – if possible with an electric agitator operating at low speed.
- Place component A on a balance and add component B. ATTENTION: The mixing ratio of A:B is 100:4 by weight!

Parameters / Dimensions of dispersion disc

- Peripheral speed of dispersion disc: 2-5 m/s
- Diameter of vessel: 2 to 3 times the diameter of the dispersion disc.
- Position of dispersion disc: in the lower third of the vessel.

IMPORTANT: Immediately after adding the hardener component B start mixing of A and B components!

- Mix both components for approx. 5 min. using an electric agitator operating at low speed. Foaming is to be avoided.
- The mixture should then be filtered, e.g. using a nylon filter with a pore size of 125-150 µm. The product is ready for use after mixing. If the application requires the viscosity to be modified, use deionized water or tap water at a hardness of ≤ 10 °dH.
- When applying the mixture with an automatic spray system, we recommend installing an agitator in the storage container to prevent solid particles from settling.
- Cover the storage vessel containing the mixed product with a lid in order to prevent the formation of a solid top layer caused by air drafts.
- Ideally, the mixture is processed immediately at an ambient temperature (25 °C). The maximum processing time (pot time) of the mixture is 5-8 hours. After this period we recommend removing all residues from the spraying equipment, feed lines and storage container before filling it with fresh material.
- Clean the spraying equipment, storage container, etc. with tap water (see also “Special notes”). Dried residues can only be removed with solvent.

– Open packs should be closed again immediately after use.
– Klübertop TP 29-1310 N A/B is a water-based product requiring a minimum temperature to form a coating layer. It should therefore not be processed at ambient temperatures below 10 °C.
– Please see the product data table for the drying and hardening conditions.

Special notes

Converting a system from solvent-containing to water-miscible bonded coatings

Flammable coatings, adhesives, etc. usually contain organic solvents and binders which are not water-miscible.

Observe the following instructions when converting a system from solvent-containing to water-miscible bonded coatings in order to prevent incompatibility reactions or system clogging caused by paint precipitation:

In case of short-term conversions (e.g. for testing purposes) it is indispensable to use a HYBRID SOLVENT as an INTERMEDIATE CLEANING AGENT. It is important for the solvent to be compatible with the solvent-containing coating and also with the water-miscible coating.

The following INTERMEDIATE CLEANING AGENTS are suitable:

– acetone
– butyl glycol
– isopropanol

Before using the intermediate cleaning agent, make sure it is compatible with the solvent-containing coating.

Steps of conversion to a water-miscible coating:

1. Clean the equipment with a solvent/cleaner compatible with the flammable coating.
2. Use an intermediate cleaner (as described above).
3. Secondary cleaning with water.
4. Apply the water-miscible coating.

For a permanent conversion to water-miscible coatings we recommend replacing all hoses, control valves and feed lines

Product information

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Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

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