Klübertop TP 38-901

Colourless, thermosetting and water-miscible bonded coating for the food-processing and pharmaceutical industries

Benefits for your application

- **Suitable for the food-processing, drinking water and pharmaceutical industries**
  - The product is NSF-H1 registered and meets the EU regulations pertaining to food grade products.
  - Drinking water approval according to DVGW worksheet W 270 and ACS and WRAS certificate
  - Complies with the requirements for organic coatings in drinking water applications
- **Hygienic and dry compared to oil/grease lubrication**
  - No contamination with oil or grease
  - Sealing rings and other elements are prevented from sticking together during automatic feeding
  - No VOC filter required since the product is based on water
- **Cost-saving and efficient compared to lubricant-free procedures**
  - Reduction of assembly forces by up to 40 % enables clean and easy assembly
  - Shorter downtimes and increased production volumes possible due to low friction coefficients
  - Easy handling of small mass-produced parts

Description

Klübertop TP 38-901 is a water-miscible, thermosetting, single-component bonded coating for the food-processing, drinking water and pharmaceutical industries.

The dry film provided by Klübertop TP 38-901 fulfils the following requirements:

- European and German regulations on food-grade products (FABES certificate CON 6222-2018).
- Klübertop TP 38-901 is NSF H1-registered and therefore complies with FDA 21 CFR § 178.3570. The lubricant was developed for incidental contact with products and packaging materials in the food-processing, cosmetics, pharmaceutical or animal feed industries. The use of Klübertop TP 38-901 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.
- Requirements of the Guideline for the Hygienic Assessment of Organic Coatings in Contact with Drinking Water with regard to seals and equipment of pipes. Furthermore, it fulfills the requirements for repair systems for tanks in domestic and other installations with 1/100 of the area of the tank.

Application

Klübertop TP 38-901 can be used, for example, to reduce assembly forces in a clean way and ensure problem-free automatic feed without a stick effect.

Food-processing industry:

Components where contact with the food product cannot be ruled out (e.g. bottle chain conveyors or seals).

Drinking water industry:

Seals and equipment in contact with drinking water

For applications with technically unavoidable food contact, it is important to follow the heat-setting conditions stated in this product information.

Application notes

Klübertop TP 38-901 tends to settle on the bottom and should be stirred before use. After stirring, filter the product (e.g. using a nylon filter with a pore size of 125 - 150 µm). The product can be applied by spraying, dipping or by brush.

Spraying:

Feed pressure: approx. 2 bar

Nozzle diameter: 0.5 to 0.8 mm

Compressed-air or high-volume/low-pressure spray guns can be used. If Klübertop TP 38-901 is sprayed, ensure workplace health and safety.

Recommended layer thickness for metal and plastic surfaces: approx. 5 µm. Recommended layer thickness for elastomer surfaces: ≤ 5 µm.

Make sure that the compressed air used is free from oil and water.

Heat-setting conditions: see product data

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The bonded coating offers good adhesion on elastomers, plastics and metals. In some cases, plasma treatment may improve adhesion to plastic or elastomer surfaces.

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 38-901
Can 1 l	+
Bucket 15 l	+

Product data	Klübertop TP 38-901
Article number	099030
NSF-H1 registration	131 545
Lower service temperature	-40 °C / -40 °F
Upper service temperature	200 °C / 392 °F
Appearance	transparent
Colour space	white
Runout time, DIN EN ISO 2431, with flow cups, 4 mm nozzle	approx. 35 s
Density, DIN EN ISO 2811, at 20 °C	approx. 1 g/cm³
Heat-setting at an object temperature of 125 °C	approx. 20 min
Yield with a tribo-film thickness of 10 micrometer	approx. 17 m²/l
Friction coefficient, Tannert sliding indicator, room temperature, vmax = 0.243 mm/s, F = 50 - 300 N	approx. 0.04
Friction coefficient (μ), elastomer sliding friction test DIN 53375, specimen EPDM, Shore 65, opposing body steel	approx. 0.22
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	12 months

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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