



DF 931

MICRO-PE DRY LUBRICATION FILM

microGLEIT DF 931 is a water based suspension of microWHITE solid lubricants – no hazard labelling required!

The semi-matt dry film provides excellent lubrication properties with very low friction.

Product Features

microGLEIT 931 is designed especially for stainless steel screws, self-drilling and thread-rolling screws for achieving the lowest possible friction with low scattering. The performance level of 931 is even higher than from microGLEIT DF 911 and DF 921.

After application, microGLEIT DF 931 gives a transparent, almost invisible layer. For improved film building properties a little alcohol is added to the formulation.

- DF 931 is designed to achieve defined, reproducible friction values with lowest scattering.
- High abrasion resistance
- The layer is (almost) not visible but can be detected by means of UV-light.
- High adhesion on a wide variety of materials
- No impact on the substrate material
- No subject of hazard labelling, environmentally friendly

Product Application

Typical applications of microGLEIT DF 931 are bulk parts, which have to be coated economically with a dry film lubricant in order to improve their sliding properties

The coating is used to achieve a defined, predictable frictional behaviour, thus enabling easier and faster assembly. The dry lubricant replaces oil or grease lubrication.

Typically DF 931 is applied on:

- Stainless steel bolts and nuts
- Facade screws
- Thread-rolling and self-drilling screws
- Galvanically refined bolts and nuts
- Pinched nuts
- Aluminium Nuts
- Bulk parts with inorganic metal coatings
- Self-tapping and thread forming screws
- Rivets, dowels

Instructions for Use

- microGLEIT DF 931 is supplied as a concentrate - please protect from frost!
- Before application microGLEIT DF 931 has to be diluted with water (at least drinking water quality). The water is added to the product slowly with constant stirring.
- The parts to be coated have to be free from oil and dirt.
- For best film building we recommend to preheat the parts to approximately 40–45 °C / 104–113 °F.
- After wetting of the parts they have to be dried with hot air at ~50 — <60 °C / 122 — <140 °F.
- In order to avoid condensation water on the parts, we recommend to pack the parts only after cooling down to ambient temperature.

- It is important to control the bath concentration regularly — please ask us for instructions.
- In order to prevent unwanted foaming of the coating bath, too heavy circulation or stirring of the bath should be avoided. A suitable antifoam additive can be ordered under the name ‚microGLEIT AF-90‘.
- Keep bath and container closed in order to avoid unwanted evaporation and contamination!

Product Characteristics microGLEIT DF 931

Characteristic	Standard/ Parameter	Unit	DF 931	
Appearance (as delivered)	visually	—	milky white liquid	As Delivered
Density	DIN 51757	g/cm ³	~ 1,0	
Viscosity	DIN 53211 / 4 mm	s	30 – 50	
Thinner	—	—	water („drinking water quality or de-ionized“)	
pH-Value	—	—	4,5 – 5,8	
Available Container Sizes	—	—	20 kg closed head pail 200 kg drum – 600/1000 kg IBC	
Usable Life - Closed original container		months	12	
Handling Precautions	—	—	see SDS	
Appearance	visually	—	semi-matt	Applied
Service Temperature	—	°C /°F	-25 to +100 / -13 to 212	
Friction value μ	Screw-Test		0,08–0,10	

Dilution Ratio (DF 931 : Water) Depending on Coating Process and Specific Requirements

Centrifuge	Immersion Drum	Very low μ required	Process
1 : 1to 1 : 2	1 : 2 to 1 : 7	1:1 to 1:2	