



DF 977

DRY FILM LUBRICANT

microGLEIT DF 977 is a solution of special synthetic solid lubricants in an organic solvent. The resulting dry, thin lubricating film is barely visible and provides excellent lubrication properties..

Product Features

microGLEIT DF 977 is a solvent based lubricant with easy application and rapid drying properties.

- The $\mu = 0,1$ lubricant! DF 977 provides a stable, defined coefficient of friction of $\mu = 0,1$ especially on threaded connections (in general independently of substrate material and surface conditions)
- The thin, dry and barely visible sliding film with universal applicability for industry and DIY
- High lubricity and load carrying capacity
- Good adhesion on a wide variety of substrates, thus universally applicable
- The layer is (almost) not visible but can be detected by means of UV-light
- Wide operating temperature range from -40°C to $+80^{\circ}\text{C}$
- No negative impact on surface and material properties of the lubricated parts

Instructions for Use

- microGLEIT DF 977 usually is used as delivered. The clean surface (free from oil, grease and particles) will be coated with the liquid product. After evaporation of the solvent the surface of the part is coated with a well adhering, dry film. Using the product as an aerosol is extremely practical.

Following alternative application methods are possible as well:

- Spraying – all industry standard methods are possible
- Dip-coating – especially effective with bulk material or non scooping parts
- Dip-spin-coating – the industry standard for bulk materials - also for scooping parts
- paint-roller or brush-application – when other methods are not possible
- After the wet film is applied, the solvent must be evaporated to get a dry film. This can be done at room temperature.

Product Application

(Examples)

microGLEIT DF 977 is a very versatile lubricant, easy to apply and strong in performance.

Typically DF 977 is applied on:

- Jammed or stiff slideways, joints, guides made of wood, plastic, metal etc.
- Bolts and nuts (galvanised, stainless steel, zinc-flake, plastic)
- Mechanical elements made of plastic, e.g. switching cams, adjusting spindle, etc..)
- Laminar sealing rings, O-rings, gaskets
- Sliding contacts on awnings, blinds, drawers, camping equipment, sports equipment, etc..
- Hinges, locks and fittings
- Lubrication of precision mechanics, e.g. for textile machines

- To obtain a uniform film formation and a short drying time, we recommend to preheat the parts to be coated (~40 °C) and /or to dry the coating with warm air (~ 40 °C) when using DF 977 as bulk material.
- Close immersion baths after finishing work and generally keep them open as short as necessary, avoid unwanted evaporation and contamination.
- Avoid burrs or sharp edges on sliding partners.
- When used on rubber or plastic parts, the compatibility with the solvent used in microGLEIT DF 977 must be checked before starting serial production. Due to the short exposure time with the solvent content, however, incompatibilities are usually unlikely.

Typical Properties microGLEIT DF 977

Test /Feature	Standard/ Parameter	Unit	DF 977	
Appearance	visually	—	transparent liquid	As Delivered
Density	DIN 51757	g/cm ³	~ 0.8	
Viscosity (bulk material)	DIN 53211 / 3 mm	s	~ 15 – 22	
Flash-Point	DIN EN 57	°C	> 21	
Curing Time (bulk material)	—	min @ °C	15 - 30 @ RT (20 °C)	
Available Container Sizes	—	—	2.5 / 5 / 20 l canister; 400 ml aerosol	
Usable Life - Closed original container		months	12	
Handling Precautions	—	—	flammable; see SDS	Applied
Appearance	visually	—	transparent, colorless	
Service Temperature	—	°C	-40 to +80	
Friction value μ	Screw-Test		~0.09 – 0,11	
Layer Thickness		μm	~ 0.5 – 1 (up to 5)	