



LS 877

PTFE ANTI-FRICTION COATING

smartGLEIT LS 877 is a solvent based anti-friction-coating containing especially selected PTFE solid lubricants and a matching binder resin thereto.

Product Features

After application and evaporation of the organic solvent, smartGLEIT LS 877 produces a dry, barely visible solid film layer with excellent adhesion even on smooth surface. This makes smartGLEIT LS 877 suitable as a universal dry sliding film. In addition LS 877 provides excellent release properties and therefore is perfect for optimised demoulding of rubber and elastomer parts.

- Thin, barely visible sliding film
- Good adhesion on most substrates
- Good lubrication performance, low and constant friction values
- Good release properties
- Wide service temperature range

Product Application

smartGLEIT LS 877 is a universal solid film lubricant and release agent. Typical Applications:

- Stiff or jamming friction contacts on
 - slideways, guides, ...
 - joints
 - locksmade of wood, plastic or metal
- Mechanical plastic parts like spindles, adjusting mechanisms, actuators, switching cams,
- plunge-type armatures for contactors
- O-rings, gaskets, laminar sealing rings,...
- Screws and nuts
- Release agent for rubber and elastomer production, e.g. for extrusion of rubber hoses (friction contact rubber hose — steel mandrel)

Instructions for Use

- smartGLEIT LS 877 is delivered ready-to-use (bulk ware and aerosol). It may be diluted with smartGLEIT TC 800 Thinner.
- The easiest method of application is spraying via aerosol can. For the bulk ware following application methods are possible:
 - Spraying of bulk ware – 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
 - Shake or stir well before use and also regularly during use – please take care that the fluid vortex is laminar, so no air will be stirred into the product
- smartGLEIT LS 877 should be applied on clean surfaces only.
- Usually only one friction partner is coated — ideally the one „with the longer sliding distance“.

- After the wet film is applied, the solvent must be evaporated to get a dry film. We recommend preheating the parts to be coated (depending on process up to 40 °C/104 °F) and / or drying with warm air (~50–70 °C / ~122–158 °F). Besides speeding up the process this will help to generate an even coating.
- The coating equipment should be cleaned after the job is done - please close the coating bath or the container during and after work.
- Look for application friendly design — avoid burrs or sharp edges on sliding partners.
- The adhesion of the coating can be significantly increased by using pretreatments e.g. sandblasting, phosphating, anodising or plasma treatment.
- When used on rubber or plastic parts, the compatibility with the solvent used in smartGLEIT LS 877 must be checked before starting serial production. Due to the short exposure time with the solvent content, however, incompatibilities are usually unlikely.

Typical Properties smartGLEIT LS 877

Test/Feature	Standard/ Parameter	Unit	LS 877	
Appearance (as delivered)	visually	—	whitish, translucent liquid	As Delivered
Density	DIN 51757	g/cm ³	~ 0.8	
Viscosity	DIN 53211 / 3 mm	s	15 – 25	
Thinner	—	—	smartGLEIT TC 80	
Flash Point	DIN 51755	°C / °F	> 21 / 70	
Available Container Sizes	—	—	5 l pail	
Usable Life - Closed original container		months	12	
Handling Precautions	—	—	pls. see SDS	Applied
Appearance (Applied)	visually	—	semi-matt dry film	
Drying Time			20–30 min @ 20 °C / 68 °F	
Service Temperature	—	°C/°F	-180 to +250 / -292 to 482 °F	
Friction Value μ	Screw-Test		~0.1	
Layer Thickness		μm	2–5 (up to 15)	