



# LS 855

## MoS<sub>2</sub> ANTI-FRICTION COATING

smartGLEIT LS 855 is an air-curing anti-friction coating with a synergistic combination of solid lubricants (MoS<sub>2</sub>) and a solvent based, inorganic binder resin.

### Product Features

smartGLEIT LS 855 is air-curing already at room temperature. LS 855 is the classic MoS<sub>2</sub> anti-friction coating, suitable for a great number of applications.

- Dark grey, dry sliding film
- Good adhesion on many substrates
- Outstanding pressure resistance
- Very low friction values possible
- Ideal for assembly and running-in
- Prevents from stick-slip
- Wide service temperature range - up to 450 °C (under absence of O<sub>2</sub>)

### Product Application

#### • Dry Lubrication

smartGLEIT LS 855 can be used as dry lubricant in all applications where lubrication with oil or grease is not possible. LS 855 is perfect for dry lubrication of mechanical elements during assembly or improving the running-in procedure of highly loaded components.

#### • Chipless Metalworking

smartGLEIT LS 855 is also well suited for metal forming processes of critical materials. Cold fretting will be avoided and a high degree of deformation is possible.

#### • Other Application examples:

- Bushings, gears, rivet bolts and dowel pins
- Bolts and nuts (of stainless steel), washers

### Instructions for Use

- smartGLEIT LS 855 is delivered ready-to-use (bulk ware and aerosol). It may be diluted with smartGLEIT TC 80 Thinner.
- The easiest method of application is spraying via aerosol can.  
For the bulk ware following application methods are possible:
  - Spraying of bulk ware – most 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 855 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 and / or drying with warm air (~ 60 °C / 140 °F) – Besides speeding up the process this will help to generate an even coating.
- It is important to work in a well ventilated area, otherwise combustible mixtures may occur. Also the necessary precautions for handling flammable liquids must be obeyed.
- 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 855 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 855

Test/Feature	Standard/ Parameter	Unit	LS 855	
Appearance (as delivered)	visually	—	dark grey liquid	As Delivered
Density	DIN 51757	g/cm <sup>3</sup>	~ 1	
Viscosity	DIN 53211 / 3 mm	s	~16 to 26	
Thinner	—	—	smartGLEIT TC 800	
Flash Point	DIN 51755	°C / °F	> 21 / > 70	
Available Container Sizes	—	—	10 kg Hobbock	
Usable Life - Closed original container		months	12	
Handling Precautions	—	—	pls. see SDS	Applied
Appearance (Applied)	visually	—	dark-grey dry film	
Drying Time			30–50 min @ 20 °C / 68 °F	
Service Temperature	—	°C/°F	-180 to +400 / -292 to 752 °F	
Friction Value $\mu$	Screw-Test		~0.06	
Layer Thickness		$\mu\text{m}$	3 to 20	