



# LS 8012

#### HEAT CURING ANTI-FRICTION COATING

### **Product Features**

- Dark grey dry film lubricant with high adhesion level on various surfaces
- High level of media resistance
- Decorative finish
- Very high pressure resistance
- Suitable for dry lubrication as well as hybrid lubrication (e.g. in combination with greases or oils)
- Wide range of working temperatures (-70 to +280 °C, for short times up to 300 °C)
- Good Corrosion protection (non cathodic)

# smartGLEIT LS 8012 is a solvent based, heat curing anti-friction-coating with a synergistic combination of solid lubricants containing MoS<sub>2</sub> and a high performance organic binder resin.

## **Product Application**

- smartGLEIT LS 8012 can be recommended whenever lubrication with oil or grease is not possible or not desired.
- LS 8012 is also well suited for lifetime lubrication (dry, solid lubrication as well as hybrid lubrication) of many mechanical elements some examples are:
  - gears
  - bearing bolts, clevis pins, adjusting cams
  - plunger-type armatures
  - spindle drives, shaft-hub connections
  - journal bearings, slideways
  - high temperature lubrication
  - etc.

### Instructions for Use

- smartGLEIT LS 8012 can be applied with common industrial application technologies, such as
  - Spraying for best layer quality
  - Dip-coating for non scooping parts (,medium size')
  - Dip-spin-coating for bulk parts
  - roll or brush special applications
- Depending on application LS 8012 can be used as delivered or diluted (Thinner TC 88-NE, which also used for cleaning the application equipment).
- The product must be stirred well before use and regularly during processing. Please take care that the fluid vortex is laminar, so no air will be stirred into the product.
- Coating of one friction partner usually is sufficient (best the one with the longer sliding distance).
- The surface to be coated has to be clean pretreatments such as sandblasting, phosphating or plasma usually increase the layer adhesion.
- We recommend a layer thickness of 10 to 20  $\mu$ m but this may vary depending on application.





- In order to achieve media resistance and best lubrication performance, the dry coating must be cured at elevated temperatures (see table below).
- In most cases it is beneficial to preheat the parts before applying the coating.
  (60 to max. 150 °C, (140 to max 302 °F) depending on application) Obey safe handling instructions of product!
- Look for application friendly design avoid burrs or sharp edges.
- Clean application equipment after use (Thinner TC 88-NE) and keep coating in closed containers or closed dipping baths.
- For further technical support please ask our technical service we will be happy to support you.

Test / Feature	Standard/ Parameter	Unit	LS 8012	
Appearance (as delivered)	visually	—	dark grey laquer	
Solid Lubricants (Type)		—	MoS <sub>2</sub>	As Delivered
Binder Resin			organic	
Density	DIN 51757	g/cm <sup>3</sup>	~ 1.1	
Flash-Point	DIN 51755	°C / °F	> 25 / 77	
Viscosity	DIN 53211 / 5 mm	S	33–47	
Thinner			smartGLEIT TC 88 NE	
Available Container Sizes		—	10 / 20 kg pail	
Usable Life - Closed original container		months	6	
Handling Precautions		—	see SDS	
Appearance	visually		dark-gray; dry film	Applied
Service Temperature		°C / °F	-70 to +280 / -94 to 536	
Curing (holding time @ temp.)	@ 250 °C / 482 °F @ 220 °C / 428 °F @200 °C / 392 °F	min	> 5 > 40 > 120	
Layer Thickness		μm	5 to 25	

### **Typical Properties smartGLEIT LS 8012**

The information given and the recommendations made herein reflects our current knowledge and can only provide a first overview. The given values are not eligible for creating specifications. We reserve the right to make changes based on technical developments or changes in legislation. Due to the wide range of possible applications and operating conditions, the product information can only be indicative of possible applications. Therefore, no binding liability and warranty claims can be derived. In any case we strongly recommend to carry out tests before use and thus determine if the product is meeting all requirements and expectations.