



LS 848

PTFE ANTI-FRICTION COATING

smartGLEIT LS 848 is a water based anti-friction-coating containing especially selected PTFE lubricant dispersion and a matching binder resin thereto.

Product Features

After application and evaporation of the solvent (water) smartGLEIT LS 848 produces a dry, barely visible solid film layer with excellent adhesion even on smooth surface. This makes the smartGLEIT LS 848 suitable as a universal dry sliding film.

In addition LS 848 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
- Water based, thus environmentally friendly

Product Application

smartGLEIT LS 848 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,
- Keepers of 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 848 usually is used as delivered; If needed, it may be diluted up to 1:2 (LS 848:H₂O).
- De-ionised water has to be used as diluent.
- Following application methods are possible:
 - 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
- 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 848 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 (approx. 50–70 °C / 122–158 °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. In general the wet time of the applied coating should be kept as short as possible.
- The coating equipment should be cleaned after the job is done - please close the coating bath or the container after work.
- 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 oxalating.
- Protect (liquid) product from frost!

Product Characteristics smartGLEIT LS 848

| Test/Feature | Standard/ Parameter | Unit | LS 848 | |
|--|------------------------|-------------------|--|--------------|
| Appearance (as delivered) | visually | — | whitish liquid | As Delivered |
| Density | DIN 51757 | g/cm ³ | ~ 1.05 | |
| Viscosity | DIN 53211 / 3 mm | s | 35 – 50 | |
| Thinner | — | — | water („drinking water quality or de-ionised“) | |
| pH-Value | — | — | 7.8 – 9 | |
| Available Container Sizes | — | — | 25 kg plastic pail | |
| Shelf Life - Closed original container | | months | 4 after delivery | |
| Hazard Notes | — | — | pls. see SDS | Applied |
| Appearance (Applied) | visually | — | semi-matt dry film | |
| Drying Time | | | 20–30 min @ 20 °C / 68 °F | |
| Operating Temperature | — | °C/°F | -70 to +250 / -94 to 482 °F | |
| Friction Value μ | screw-test | | ~0.09 | |
| Layer Thickness | | μm | 2–5 (up to 10) | |