



Product Information

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TriboSys™ MDF-A DryFilm Medical Coating

Description:

TriboSys™ MDF-A is a solvent-based, dry film coating designed to impart ultra-low coefficient of friction, high lubricity, anti-stick, and corrosion resistance to medical devices and tools. This coating utilizes a proprietary fluoropolymer resin system designed to generate a highly durable, abrasion resistant, and chemically inert thin-film coating on the applied surface. TriboSys™ MDF-A is high temperature and autoclave stable. This coating imparts very low surface energy, greatly reducing or eliminating build-up and fouling. Benefits of this product include:

- Exceptional durability and abrasion resistance
- Ultra-low coefficient of friction; High Lubricity
- Minimization of "slip-stick" issues
- Chemically Inert; Autoclave stable
- Clean, Non-oily, Non-migrating
- Eliminates build-up and fouling

Applications:

TriboSys™ MDF-A is formulated to provide unmatched utility and performance on numerous medical device and tool applications which require a dry film, highly lubricious, and anti-fouling surface coating. Typical applications:

- Lab Equipment and Supplies
- Plastic or Metal Medical Device Components
- Plastic or Metal Surgical Device Components

Surface Preparation

1. Surface preparation is important for all application methods. All surfaces should be clean and dry before TriboSys™ MDF-A is applied. Controlling surface roughness improves coverage, especially in air-dried applications; a smooth surface can improve results.

Application Methods:

1. Shake can well prior to use. Hold can approximately 6-10 inches away from a non-heated surface and apply a light coat of the dry lubricant.

Note: Material will apply wet and transparent but will dry to a fine-white coat.

2. Allow the solvent to dry completely. This will ensure the most effective coating for durability. Typical dry time is between 1-15 minutes depending on temperatures.
3. If overapplication is observed after drying, lightly wipe the surface with a soft cloth to remove overapplication.

Melt-Coating for Improved Adhesion

Although it is not necessary to heat TriboSys™ MDF-A, performance can be enhanced if a heating cycle is completed prior to operation. After TriboSys™ MDF-A is applied and the carrier is flashed off, the surface can be heated to fuse the coating. The temperature for heat-curing the coating is 305–310°C (581–590°F). When melt-coating TriboSys™ MDF-A, provide adequate ventilation. Heat-curing the coating is completed as follows:

1. Measure the surface temperature directly with a thermocouple. You may observe a change in coating appearance, which may alter initially from an opaque white to a darker, translucent look and then appear clear and wet.
2. Maintain the temperature of the coated surfaces (not the temperature of the ambient air) at the correct temperature for 5–10 minutes.
3. If a white residue is left on the metal surface, buff with a soft cloth.

Physical Properties:

Primary Polymer:.....Fluoropolymer Resin
Appearance:.....Opaque Dispersion
Odor:.....None
Specific Gravity:.....1.1 g/mL @ 25°C
Flash Point:.....None
VOC.....None

Storage and Handling:

TriboSys™ MDF-A should be stored in a well-ventilated area which is cool and dry. Do not expose to freezing temperatures.

TriboSys™ MDF-A should not be used at temperatures above 280 °C or near open flames. Chemical breakdown will occur which will result in the generation of toxic fumes. When spraying, avoid inhalation of mist and exposure to skin. Always wash hands after handling.

Safety Data Sheet (SDS) is available upon request.

LIMITATION OF LIABILITY AND REMEDIES: Manufacturer warrants that, at the time of shipment by the Manufacturer, this product is free from defect in material and manufacture. If the product is proved to be defective, the exclusive remedy, at Manufacturer's option, shall be refund of the purchase price or replacement of the defective product, provided written notice of the defect is given no later than one year after the date of shipment by the Manufacturer. Manufacturer shall not otherwise be liable for loss or damages whether direct, indirect, incidental or consequential, regardless of the legal theory asserted, including negligence and strict liability. **Manufacturer expressly disclaims all implied warranties, including the implied warranty of merchantability and the implied warranty of fitness for a particular purpose. There are no warranties which extend beyond the description on the face hereof.**

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For further technical information call 800.992.2424 or 203.743.4447

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