

# **PRODUCT DATA SHEET**

# MICROFINE MOLY & GRAPHITE DRY FILM LUBRICANT PTI Techlube Series

### **DESCRIPTION**

**Microfine Moly & Graphite Techlube** is moly and graphite in a multi-polymer bake cure resin binder that will provide a durable, dry film coating with an extremely low coefficient of friction. This dry film lubricant is intended to be applied to equipment such as but not limited to steel, aluminum, magnesium, clutches, gears, shafts and other mechanical parts which function under extreme weathering and/or operating conditions. This product is perfect for applications that require a lubricated surface where greases will not work.

#### COLORS

This Techlube comes in a dark gray.

#### 24°F Flash Point **Boiling Point** 175°F to 395°F Thinner PTI-1002 -100°F to 1000°F Thermal Stability **Recommended Primer** PTI-YACID or PTI-GACID (Acid Etching Primer) Weight (pounds per gallon) 10.16 lbs VOC 414 g/L Pint, Quart and Gallon Containers Container Size

# MOLY SPRAY PROPERTIES & CHARACTERISTICS

#### SHELF LIFE

Shelf life is only applicable for materials stored in unopened and undamaged original factory filled containers. 1 year when stored between 50°-85° Fahrenheit.

# **APPLICATION**

**Surface Preparation:** Surface to be coated must be chemically cleaned. It must be free of oxides, soils, greases and other contaminants. Cleaning and surface preparation prior to the application of any *Techlube* is <u>extremely</u> <u>important</u> to form a proper bond and maximize the corrosion resistant properties of the *Techlubes*.

Metal Surfaces: The following metal surfaces (with the exceptions noted) may be cleaned using an industry-approved vapor degreasing method, preferably a method using Perchlorethylene. Other methods include: A solvent wash with IPA or Acetone, water based cleaner/degreaser wash with PTC-2001, PTC-2002, Bizzy-B<sup>TM</sup> or MotoSpa<sup>TM</sup>. Followed by a heavy Alkali bath or phosphate conversion coatings such as PTI's Acid etching primer. The use of any acids as a cleaner of carbon steel should be avoided.

**Application Method:** This coating may be applied by spraying or dipping. Spraying should be done in a suitable area having adequate ventilation. Care should be taken that no other materials be sprayed in the immediate area at the time of application to avoid contamination.



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- **Spray Application:** Concentrate shall be mixed with the PTI-1002 at a ratio of approximately 1 to 2 parts of solvent to 1 part concentrate. The amount of solvent depends on the type of application and/or equipment. The mixture should be such that the spray goes on the part thin and wet. A hairy or granular spray usually signifies too little solvent. Each coat should be sprayed at 1 millimeter thick. No less than two coats should be applied to the parts, more coats can be applied if necessary.
- **Dip Application:** Concentrate shall be mixed with the PTI-1002 at a ratio of 2 to 4 parts solvent to 1 part concentrate. Under thinning for dip applications can cause excessive build up.

**Primer to Promote Bonding:** If the parts being sprayed will be under unusually harsh conditions and an extra strong bond is required, then apply the Acid Etching Wash Primer prior to applying the lubricant. Please refer to the PTI Acid Etch technical data for application instructions.

#### CURING

- After applying the techlube let parts air dry for 20 minutes
- Steel Alloys, Aluminum and Copper Alloys, bake for 1 hour at 350°F.
- Magnesium, bake for 1 hour at 310°F

After removal from the oven, cooled, parts should be visually inspected for blistering, discoloration and full coverage. Parts that require close tolerances shall be inspected for mil thickness of the coating. Coatings should be dark gray to black in color. A sufficient number of parts shall be checked for adhesion by firmly applying pressure sensitive masking tape to the surface and removing it abruptly. No flakes or large particles of the coating shall adhere to the tape. A faint uniform covering of powdery materials which occasionally may adhere to the tape is not to be considered cause for rejection.

NOTE: Application of PTI products requires the use of all OSHA approved safety equipment, including proper ventilation. Additionally, PTI products require the recommended temperature/humidity conditions and film thickness ranges for optimal performance. The material, hangar, and aircraft skin temperatures should be no lower than 75° F / 25° C before, during and after application.

# **HEALTH, SAFETY, & STORAGE REQUIREMENTS**

Refer to each individual material SDS (Safety Data Sheet) for specific requirements on the health, safety, storage and handling requirements. Follow all local, state, and national regulations during surface preparation, material application and cleanup.

# **PRODUCT INFORMATION & DISCLAIMER**

Product Data Sheets are periodically updated to reflect new information. It is important to use the latest and most recent revision for the product being used. The foregoing information is accurate to the best of our knowledge. However, due to differences in customer handling, use and method of application which are not known and are beyond our control, Products Techniques, Inc. makes no warranties as to the end result.