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PRODUCT DATA SHEET: TLML Dry Film Lubricant

Part#: TLML

SELECTION DATA

PRODUCT DESCRIPTION:

TLML is a thermally cured Dry Film Lubricant. TLML has been designed to provide high pressure lubrication to surfaces subject to sliding, flexing, rotating or oscillating motion. TLML makes use of several design characteristics in managing friction. The coating applies in a thin film that is based on a resin system that allows the coating to be burnished to a film less than .0003" in thickness, allowing extremely tight clearances to be utilized. The coating may be pre-burnished prior to installation/assembly of a part or will burnish during operation. The coating is also designed to aid in the more even transfer of heat, reducing hot spots. This is particularly beneficial in parts that flex such as a spring. The low 300°F cure temperature allows for the coating to be used on a variety of substrates.

TLML may be used in conjunction with TLMB when a physical buildup of a part is desired. Top coating with TLML increases lubrication at the surface, while the TLMB creates a hard, durable barrier to wear. TLML may be used on both wet and non-wetted surfaces. The use of a "wet" lubricant such as oil in conjunction with TLML will increase the load that the oil can be exposed to before the liquid will be squeezed away from the part.

RECOMMENDED USES:

TLML is recommended for use on any component where heat and friction are an issue. Gears, shafts, hubs, cams, splined shafts, wear blocks, springs, bearings (Note: for Babbitt type bearings use DFL-1), pistons, cylinder walls, rotors and more.

NOT RECOMMENDED FOR: Substrates that cannot handle the cure temperature. TLML provides NO corrosion resistance.

APPLIED FILM THICKNESS: .0005" to .00015"
(Burnishes upon use)

HRC (Equivalent Rockwell C Scale): N/A

ADHESION (Tape Test ASTM D 3359): 5B

PENCIL HARDNESS TEST: N/A

IMPACT TEST (ASTM D 2794 2 lb. Weight): N/A

FLEXIBILITY/ BENDING ADHESION: Excellent

THERMAL TEMPERATURE RESISTANCE: Over 700°F constant and over 1000°F intermittent environmental.

SALT SPRAY RESISTANCE: N/A

CORROSION TEST DATA: Good

ACCEPTABLE SUBSTRATES FOR APPLICATION: Ferrous and non-ferrous substrates, plastics and composites that can handle the cure temperature.

ELECTRICAL PROPERTIES: N/A

CHEMICAL RESISTANCE: Good

FILM TYPE: TLML is a solid film lubricious material that is designed to burnish to a near zero film buildup while still providing full properties, allowing normal clearances to be maintained. TLML is a conformal coating and can burnish in use to achieve the running clearances that are optimal. In addition, TLML is impregnated into a properly prepared surface

Note: N/A refers to characteristics that are not applicable to this type of coating.

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