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PRODUCT DATA SHEET: TL Thermal Dispersant (Black or Gray)

Part#: TLTD

SELECTION DATA

PRODUCT DESCRIPTION:

TLTD is a thermally cured heat emitting coating. TLTD has been designed to improve the heat transfer ability of a coated surface. TLTD makes use of several factors in managing heat flow. The coating applies in a thin film, so as not to fill in the surface porosity, thus not reducing surface area, and also coats the surface with ingredients that enhance the flow of heat. These features are combined with a black pigment (Dark Gray is also available), making use of the black body radiation theory. TLTD will also provide excellent corrosion protection which not only enhances the appearance but extends the functional life of the coating. TLTD has a lubricant included in the formulation that makes the surface very easy to clean. TLTD is a very good oil/fluid shedding material and enhances cooling through improved heat transfer to oil and other coolants. TLTD cures at 300°F and with a special catalyst at 200°F.

For very high temperature applications only, HHTD is available and demonstrates most of the same properties as TLTD. HHTD is only recommended for applications where base metal temperatures are above 700°F constant.

RECOMMENDED USES:

TLTD is a high temperature thermal dispersant coating with good corrosion and chemical resistance. TLTD is recommended for use on any component where heat is an issue such as radiators, intercoolers, electric motors, brake systems, gear cases, heat sinks, cooling fins, etc. TLTD may be applied in multiple coats to achieve maximum thickness. Apply a single coat at a time, with a ‘flash’ at 200°F for 10 minutes between coats. Allow to cool to ambient before applying the next layer of material.

NOT RECOMMENDED FOR: Substrates that cannot handle the cure temperature.

TEMPERATURE RESISTANCE: (non-immersion)
700°F substrate, 1000°F maximum intermittent environmental

APPLIED FILM THICKNESS: .0005” to .0001”

HRC (Equivalent Rockwell C Scale): N/A

ADHESION (Tape Test ASTM D 3359): 5B

PENCIL HARDNESS TEST: 8+

IMPACT TEST (ASTM D 2794 2 lb. Weight): pass at 48”

FLEXIBILITY/ BENDING ADHESION: 90 and 180 degree double bend pass

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

SALT SPRAY RESISTANCE: 800+ hours

CORROSION RESISTANCE: Excellent

PHYSICAL PERFORMANCE (Wear & Load):
Survives Flexing and Bending

ACCEPTABLE SUBSTRATES FOR APPLICATION:
Ferrous and Non-ferrous substrates, Plastics and composites

ELECTRICAL PROPERTIES: Non Conductive

CHEMICAL RESISTANCE: Excellent; including aviation gasoline, hydraulic fluid, jet fuel, nitric acid 10%, hydrochloric acid 10%, hydrogen peroxide 3%, sulfuric acid

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