

TriboSys™ MS-381HC/383H Connector Lubricant

Description:

By combining the superior lubricating qualities of Polyphenyl Ether with the cleaning power of a hydrofluoroether azeotrope, Miller-Stephenson has created Connector Lubricant, a formulation that provides the most advanced total treatment for connectors.

Advantages:

- Cleans, lubricates and protects multi-pin connectors
- Reduces insertion forces
- Greatly increases mating cycles (especially important where high pin counts are involved)
- Extends connector life by preventing corrosion and galling
- Removes contaminants and oxides.
- Is non-migrating-contains no silicones.
- Non ozone depleting
- Available with a UV (ultraviolet) indicator
- No interference in electrical continuity
- Nonflammable
- NSN-6850-01-538-3496 (MS-383H)
- RoHS2 and RoHS3 Compliant

VOC content of MS-381HC.....522 gms/l
VOC content of MS-383H.....699 gms/l

The active ingredient of Connector Lubricant is a six (6) ring polyphenyl ether lubricant. This lubricant will help protect metal connector surfaces from excessive wear, when subjected to hundreds of mating cycles, thereby increasing the life of the connectors. It will also reduce insertion forces and provide corrosion protection in harsh environments.

Polyphenyl ethers (PPE) are very viscous fluids and only a very thin film is required. Connector Lubricant MS-381HC/383H is a 2% PPE concentration, which is at the proper concentration for connectors operating at room temperatures where there is little or no vibration. Higher concentrations are available in Bulk formulations.

Maximum Operating Temperatures

Estimated 20 year film life 230°F/110°C
Estimated 5 year film life 257°F/125°C

Note: Higher temperatures result in shorter film life.

Physical Properties: 6-ring Polyphenyl Ether

Surface Tension @ 100°F 54.2 dyne/cm

Evaporation Loss (ASTMD-972) 6.5 hrs.

400°F/204°C @ 760mm	0.04%
500°F/260°C @ 760mm	0.50%
500°F/260°C @ 140mm	1.10%

Oxidation – Corrosion wt.change of metals, mg
ASTM D 4636 (FTM 791-5307/5308) 600°F, 48h

Aluminum	0.04
Titanium	0.02
Steel	0.02
Copper	0.14
Silver	0.03

Thermal Stability 836°F/447°C

Low-Temperature Performance: Performs consistently over a wide range of low temperatures to – 20°C.

Electrical Properties: 6-ring Polyphenyl Ether

Dielectric Constant $\frac{60cy}{4.54}$ $\frac{1kc}{4.54}$ $\frac{10kc}{4.55}$ $\frac{100kc}{4.53}$
(@ 77°F/25°C)

Resistivity @ 77°F/25°C @ 500VDC 1.56 x 10¹⁴ohm-cm

Dielectric Strength 43 Kv

Safety Data Sheets are available upon request.

Subject to the EAR, ECCN 1C006.b.1

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.**