

MS-143TE PTFE Release Agent/Dry Lubricant

Description:

MS-143TE was developed as an efficient, economical, and universal release agent. This formulation is a nonflammable, non-ozone depleting release agent/dry lubricant, containing a high lubricity, low molecular weight PTFE fluoropolymer. As a dry lubricant, MS-143TE minimizes "slip-stick" and is ideal for low speed, light load applications. MS-143TE offers the following benefits:

- Efficient and consistent release of molded parts
- Outstanding lubricity (low coefficient of friction)
- Nonflammable, Non-ozone depleting formulation
- Non-migrating; Non-staining
- RoHS2 & RoHS3 Compliant

Release Agent Applications

MS-143TE formulation chemistry can be used to release the following materials and comes in concentrations ranging from 1-10 % PTFE:

- Plastics
- Resins
- Acrylics
- Urethanes
- Nylons
- Rubbers
- Phenolics
- Polycarbonates
- Polystyrene
- Elastomers

Dry Lubricant Applications

As a dry lubricant, MS-143TE is applicable on a variety of materials and will afford unmatched lubricity and wear resistance. These materials include:

- Metal
- Glass
- Rubber
- Wood
- Ceramics
- Elastomers
- Polycarbonates
- Elastomers

Physical Properties:

| | |
|------------------|---------------------------|
| Primary Polymer | Fluoropolymer |
| Appearance | White Particle suspension |
| Odor | Slight |
| Specific Gravity | 1.31 g/mL @ 77F°/25°C |
| Ozone depletion | 0.00 |
| VOC content | 910 g/L |

Recommended Application Procedure:

1. Clean mold surface thoroughly. Mechanical cleaning such as, bead media blasting or steel wool, followed by chemical cleaning, provides the best surface for application of MS-143TE. Removal of all previous mold release agent is critical.
2. Mix product thoroughly prior and continuously during use. If spraying, use spray equipment which provides a fine mist and ensure product is applied "wet". Proper air pressure and spray distance is critical for correct application of this product. Apply to mold surface which is below 50°C. **Note:** Because the PTFE settles out quickly, it is important to monitor that the PTFE stays in solution while in use.
3. Allow solvent to dry completely before molding any parts. Failure to wait until all solvent is evaporated will result in drastically reduced product performance.

Reapplication:

1. When release becomes hesitant, reapply one coat of MS-143TE in the same manner as described above.

Fused Coatings Procedure (Optional)

1. After applying the release agent, heat the surface to 581°F - 600°F. Measure the surface temperature directly with a thermocouple.
2. A change in coating appearance from an opaque white to a darker, translucent will occur. Maintain the temperature of the coated surface for 5 to 10 minutes.
3. If a white residue is left on the metal surface, buff with a soft cloth. When the coating is properly fused, it is extremely durable.

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.**