

## MS-143XD PTFE Release Agent/Dry Lubricant

### Description:

MS-143XD is a versatile and robust release agent / dry lubricant, which utilizes a rapidly drying, VOC exempt carrier solvent to enhance throughput and production efficiency. The formulation contains a high lubricity, low molecular weight PTFE fluoropolymer designed to not interfere with posting finishing operations. MS-143XD offers the following benefits:

- Efficient, consistent release of molded parts
- Outstanding lubricity and minimization of slip-stick
- VOC exempt formulation
- Nonflammable, Non-ozone depleting
- Non-migrating; Non-staining

### Release Agent Applications

MS-143XD can be used to release the following materials with virtually no transfer of the release agent:

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

### Dry Lubricant Applications

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

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

### Physical Properties:

Primary Polymer:.....Fluoropolymer  
 Appearance:.....White Particle suspension  
 Odor:.....Slight  
 Specific Gravity:.....1.58 g/mL @ 25°C  
 Ozone depletion:.....0.00  
 VOC:.....Exempt

### 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-143XD. 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.
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-143XD in the same manner as described above.

### Fused Coatings Procedure

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.**

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