



# Product Information

[www.miller-stephenson.com](http://www.miller-stephenson.com)

## 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:

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

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

### Physical Properties:

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

### 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 (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.**

**Disclaimer:** The manufacturer shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or inability to use this product. User shall determine the suitability of the product for his intended use and user assumes all risk and liability in connection therewith.

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For technical information call 800.992.2424 or 203.743.4447  
For product sales: CT 800.442.3424, CA 800.771.8161, IL 800.447.4866, Canada 800.307.2199  
[www.miller-stephenson.com](http://www.miller-stephenson.com)

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