

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

### Description:

MS-143HN is a versatile and robust release agent / dry lubricant, which utilizes a rapidly drying 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. It is used for metallic and non-metallic molds. With its superior release action, it will yield up to three times the number of release cycles compared to the more economical Miller-Stephenson formulations. It is an excellent dry lubricant for all applications and surfaces. MS-143HN offers the following benefits:

- Efficient, consistent release of molded parts
- Outstanding lubricity and minimization of slip-stick
- Nonflammable, Non-ozone depleting
- Non-migrating; Non-staining
- RoHS2 & RoHS3 Compliant

### Release Agent Applications

MS-143HN 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

MS-143HN is available in different concentrations of PTFE. Standard 3% is recommended for most applications.

### Dry Lubricant Applications

As a dry lubricant, MS-143HN 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	1.24 g/mL @ 77°F/25°C
Ozone depletion	0.00
VOC Content	725 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-143HN. 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-143HN 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.**