

ReleaSys™ 7300 Plastic Release Agent

Description:

ReleaSys™ 7300 is a next-generation, high performance, water-based mold release agent designed specifically to replace high VOC, Fluoropolymer (PFAS) systems without sacrificing performance. The ReleaSys™ 7300 offers superior non-stick and release performance in a variety of molding operations but is particularly effective for thermoplastic and thermosetting polymers. Utilization of a high release, crosslinking polymer provides a robust, ultra thin film coating that gives numerous releases from a single application. Properly applied, our product develops a durable, thin-film on the mold surfaces with minimal build-up. ReleaSys™ 7300 will not interfere with post-production finishing operation. Benefits of this product include:

- Next-Generation Crosslinking Release Agent Chemistry
- Exceptional release and non-stick properties
- Fluoropolymer, PFAS, and VOC free
- Does not effective post-molding bonding, painting or adhesion
- Fast Drying and Simple to Apply
- Clean, Non-oily, Non-migrating

Release Agent Applications:

ReleaSys™ 7300 is formulated to provide unmatched utility in compression, injection and transfer molding with the following materials:

- Organic Polymer
- Thermosetting resins
- Fluoroelastomers
- Acrylics
- Neoprene
- Thermoplastics
- Elastomers/Rubbers
- EPDM
- Nylons
- Melamine

Recommended Application Procedure:

1. Clean mold surface thoroughly. Mechanical cleaning such as bead media blasting, followed by chemical cleaning, provides the best surface for application. Removal of all previous mold release agent and contamination is critical.
2. ReleaSys™ 7300 can be applied by wiping or by any spray equipment that can produce fine atomization and deposit a uniform, thin film. Apply lightly to a warmed mold approximately 10-14 inches from the surface.

Note: Application of light coats is critical. If you experience any buildup, buff the surface, and apply one follow-up light coat.

3. **Initial Cure Method:** This process pertains to your first application after cleaning your mold. This initial cure is critical to achieve the full performance offered by ReleaSys 7300.
4. Cure times vary with application thickness and temperature. The curing process is dramatically accelerated with the application of any heating above 50°C. Temperatures below 50°C are non-ideal.
 - a. Cure times at 50 - 70°C are approximately 30 - 45 minutes
 - b. Cure times at 75 - 100°C are approximately 25 - 35 minutes
 - c. Cure time >100°C is approximately 20 - 25 minutes

Reapplication:

1. When release becomes hesitant, immediately reapply one coat of ReleaSys™ 7300 in the same manner as described previously. **No additional curing is required.** Spot touch-ups can also be done on known high wear or geometrically strained areas.

Physical Properties:

Primary Polymer	Proprietary Crosslinking Polymer
Appearance	Off-White Liquid
Odor	None
Specific Gravity	1.00 g/mL @ 25°C
Flash Point	None
VOC Content	None

Storage and Handling:

ReleaSys™ 7300 should be stored in a well-ventilated area which is cool and dry. Do not expose to freezing temperatures. Prior to use, container should be lightly agitated. ReleaSys™ 7300 should not be used at temperatures above 350 °C or near open flames. Chemical breakdown will occur which will result in the generation of toxic fumes. When spraying, avoid inhalation of mist and exposure to skin. Always wash hands after handling. Please see SDS for further information

Shelf-Life

ReleaSys™ 7300 has a shelf life of 12 months from the date of shipment.

ReleaSys™ Product Line:

Miller-Stephenson offers a selection of high performance, semi-permanent release systems to meet your mold process needs. All variants of the ReleaSys™ Series will deliver higher productivity, lower rejection rates, and higher quality products.

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.**