

ReleaSys™ 8500 Semi-Permanent Mold Release Agent

Description:

ReleaSys™ 8500 is a highly versatile water-based, semi-permanent mold release agent designed to exhibit superior durability, surface adhesion, and minimization of slip-stick on elastomer and fluoroelastomer molding applications. Properly applied, our product develops a long lasting thin-film on the mold surface with minimal mold build-up. ReleaSys™ 8500 will not interfere with post-production finishing operation. Benefits of this product include:

- Exceptional release agent durability
- Clean, Non-oily, Non-migrating
- Ideal for elastomer and fluoroelastomers
- Improves quality and consistency of molded parts
- Minimizes mold build-up and fouling

Release Agent Applications:

ReleaSys™ 8500 is formulated to provide unmatched utility in injection and transfer molding with the following materials

- Plastics
- Fluoroelastomers
- Acrylics
- Elastomers
- EPDM
- Epoxy

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 is critical.
2. ReleaSys™ 8500 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 8-10 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: 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 require approximately 20 - 30 minutes
 - b. Cure times at 75 - 100 °C approximately 20 - 25 minutes
 - c. Cure time above 100 °C are approximately 15 - 20 minutes

4. Dilution of the product can be performed if heavy application issues arise. Start with a 2:1 (ReleaSys™ 8500 to DI Water) dilution and continuing until an appropriate concentration is found. Make sure to apply water to the ReleaSys™ 8500 and not the inverse.

Reapplication:

When release becomes hesitant, immediately reapply one coat of ReleaSys™ 8500 in the same manner as described previously. Cure time is only 60-90 seconds when applied to a warm mold. Spot touch-ups can also be done on known high wear or geometrically strained areas.

Physical Properties:

Primary Polymer:.....Thermoset Polysiloxane
Appearance:.....White Emulsion
Odor:.....None
Specific Gravity:.....1.0 g/mL @ 25°C
Flash Point:.....None

Storage and Handling:

ReleaSys™ 8500 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; avoid high shear/high rpm mixing.

ReleaSys™ 8500 should not be used at temperatures above 275 °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.

Shelf-Life

ReleaSys™ 8500 has a shelf life of 12 months from the date of shipment.

ReleaSys™ Product Line:

Miller-Stephenson offers a selection of high performance water-based, 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.

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