

ReleaSys™ 89

Semi-Permanent Mold Release Agent

Description:

ReleaSys™ 89 is a nonflammable solvent-based, semi-permanent mold release agent designed to provide superior durability and high slip across a broad range of moldable substrates. This formulation is particularly effective on difficult molding application or abrasive substrates. Properly applied, our product develops a durable, thin film on the mold surface with minimal build-up. ReleaSys™ 89 will not interfere with post-production finishing operation. Benefits of this product include:

- Exceptional durability and surface adhesion
- Ideal for complex molds
- Ideal for Polyurethane, Epoxy, and Composites
- Improves quality and consistency of molded parts
- Fast evaporation and cure time
- Clean, Non-oily, Non-migrating
- RoHS2 and RoHS3 Compliant

Release Agent Applications:

ReleaSys™ 89 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 (Natural and Synthetic)
- EPDM
- Epoxy
- Polyurethanes

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. Shake can gently and deposit a uniform, thin film onto a non-heated mold. Apply light coats, approximately 8-10 inches from the surface.
3. Allow ReleaSys™ 89 to dry completely, then cure for approximately 3 - 5 minutes at normal operating temperatures. (Multiple light coats can be applied and may increase durability and maximize number of releases).

Reapplication:

When release becomes hesitant, immediately reapply one coat of ReleaSys™ 89 in the same manner as described previously. Spot touch-ups can also be done on known high wear or geometrically strained areas.

Physical Properties:

| | |
|------------------|------------------------|
| Primary Polymer | Thermoset Polysiloxane |
| Appearance | Clear |
| Odor | Slight |
| Specific Gravity | 1.3 g/mL @ 77°F/25°C |

Storage and Handling:

ReleaSys™ 89 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. Safety data sheet (SDS) is available upon request.

ReleaSys™ 89 should not be used at temperatures above 250 °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™ 89 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.**