



Product Information

www.miller-stephenson.com

ReleaSys™ 8100 Semi-Permanent Release Agent

Description:

ReleaSys™ 8100 is a solvent-based, semi-permanent mold release agent designed to provide superior durability and ease of release across a broad range of moldable substrates. ReleaSys™ 8100 uses a proprietary polysiloxane copolymer to generate a lubricous coating yielding multiple releases from a single application. This product is ideally suited for polyurethanes, plastics, and composite materials. Properly applied, our product develops a durable, thin-film on the mold surface with no build-up. ReleaSys™ 8100 will not interfere with post-production finishing operation. Benefits of this product include:

- Exceptional durability and surface adhesion
- Ideal for complex molds
- Fast evaporation and rapid cure time
- Clean, Non-oily, Non-migrating

Release Agent Applications:

ReleaSys™ 8100 is formulated to provide unmatched utility in compression, injection and transfer molding with the following materials:

- Organic Polymer
- Thermoplastics
- Thermosetting resins
- Elastomers
- Fluoroelastomers
- EPDM
- Urethanes
- Epoxy
- Neoprene
- 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™ 8100 can be applied by hand wiping application or spray application to a room temperature or heated mold surface.
3. **Hand wiping:** Use the product at full concentration and apply to a microfiber cloth. Lightly apply a single coat to ideally a heated mold surface. Do not overlap your passes over the mold. Work quickly to coat the mold, apply only the lightest of pressure to the surface.
4. If applying to a heated surface (40 - 70°C), allow the product to cure for 1-2 minutes. If applying to an unheated surface, allow product to dry completely and then heat cycle the mold surface to cure or allow 10-15 minutes for a full cure.
5. If heavy application is observed after curing, lightly buff the surface to remove excess film build-up.
6. **Spray application:** Apply a single light coat, approximately 8-10 inches from the surface. Be sure to make even, light passes of over the mold surface

7. Allow ReleaSys™ 8100 to dry completely, then cure for approximately 10-15 minutes at room temperature. Multiple light coats can be applied but is not usually necessary.

Note: If applying to a heated mold surface allow only 1 -2 minutes. Cure occurs quickly.

8. Overapplication can result in lower release efficiency and sticking. General molding requires no more than two coats to achieve optimal performance. If overapplication is detected, lightly buff the surface with a microfiber cloth to remove unadhered material.

Reapplication:

1. When release becomes hesitant, immediately reapply one coat of ReleaSys™ 8100 in the same manner as described previously. Spot touch-ups can also be done on known high wear or geometrically strained areas. Light buffing can be done prior to reapplication to clear the surface of contaminants.

Physical Properties:

Primary Polymer:.....Reactive Polysiloxane
Appearance:.....Clear
Odor:.....Hydrocarbon
Specific Gravity:.....0.79 g/mL @ 25°C
Flash Point:.....80.6 °F

Storage and Handling:

ReleaSys™ 8100 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™ 8100 should not be used at temperatures above 310 °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™ 8100 has a shelf life of 12 months from the date of shipment.

ReleaSys™ Product Line:

Miller-Stephenson's 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.

1664-8M