

ReleaSys™ RM Rotational Molding Release Agent

Description:

ReleaSys RM is a highly advanced water-based release agent designed provide multiple releases with no contaminating transfer. Ideally suited for rotational molding operations, ReleaSys RM develops an extremely durable, abrasion-resistant microfilm on the mold surface exhibiting thermally stable up to 600 F. This product effectively releases most rotational molding resins, while improving resin flow, minimizing scrap rates, and improving part quality. Benefits include

- Exceptional surface adhesion and durability
- High Temperature Stability (up to 600 F)
- No VOC content; no Odor
- Clean, Non-oily, Non-migrating
- Improves quality and consistency of molded parts
- Minimizes mold buildup and fouling

Release Agent Applications:

ReleaSys™ RM is formulated to provide unmatched utility in Rotational molding with the following materials:

- Polyethylene
- Thermo-Resins
- Thermoplastics
- Polyamide
- Polypropylene
- Urethanes

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™ RM can be applied by wiping or 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. First application after cleaning: Allow ReleaSys™ RM to cure for a minimum of approximately 20-25 minutes at normal operating temperatures, above 140° F, or perform a single heat cycle. Longer dwell times generate more durable coatings. Multiple light coats can be applied however this is not normally necessary. If multiple coats are applied, allow 10 minutes between coats.

Reapplication:

1. When release becomes hesitant, immediately reapply one coat of ReleaSys™ RM in the same manner as described previously. Cure time is accelerated 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:.....Crosslinking Polysiloxane
Appearance:.....White Emulsion
Odor:.....None
Specific Gravity:.....1.0 g/mL @ 25°C
Flash Point:.....None

Storage and Handling:

ReleaSys™ RM 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™ RM should not be used at temperatures above 325 °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™ RM 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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