



Product Information

www.miller-stephenson.com

ReleaSys™ DFX Semi-Permanent Mold Release

Description:

ReleaSys™ DFX is a non-flammable, solvent-based, dry film mold release agent designed to provide superior surface adhesion and wear resistance. Miller-Stephenson's exclusive surface activation technology and fluoropolymer resins allow for unmatched durability and maximal releases per application across a broad range of mold configurations and substrates. Our coating requires no curing or heat cycling to develop final film properties, only a short dry time. ReleaSys™ DFX is specifically effective where superior release is required and post-molding painting, bonding or adhesion is critical. ReleaSys™ DFX is a very easy and forgiving release system providing release of nearly any substrate off any molding surface. ReleaSys™ DFX will not interfere with post-production finishing operation. Benefits of this product include:

- Dry Film Release System
- Exceptional release and ease of application
- Room-temperature cure
- Unmatched surface adhesion and durability
- Ideal complex molds or abrasive substrates
- Silicone, wax, and oil free
- Clean, Non-oily, Non-migrating
- Ultra-low odor, VOC-exempt solvent

Release Agent Applications:

Our specialized chemistry can be used to release the following materials:

- Plastics
- Resins
- Acrylics
- Urethanes
- Nylons
- Rubbers
- Phenolics
- Polycarbonates
- Polystyrene
- Elastomers

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 ReleaSys™ DFX well prior to and during use. Apply approximately 6-10 inches away from a non-heated mold surface and apply a light coat of ReleaSys™ DFX.

NOTE: Material will apply wet and transparent but will dry to a fine-white coat.

3. **Allow solvent to dry completely before molding or recoating. Failure to do so will greatly affect final film performance. Typical dry time is between 1 - 5 minutes depending on temperatures and applications volumes.**
4. If overapplication is observed after drying, lightly wipe the surface with a soft cloth to remove overapplication.
5. Although it is not necessary to heat ReleaSys™ DFX, performance can be enhanced if a heating cycle is completed prior to operation. Heating the coating to 550°F for 5-8 minutes, cooling, and wiping the excess from the surface will heat fuse the coating to the surface. This will ensure the most effective coating for durability and cycle life

Reapplication:

1. When release becomes hesitant, reapply one coat of ReleaSys™ DFX in the same manner as described previously.

Physical Properties:

Primary Polymer:.....Fluoropolymer
Appearance:.....Opaque/Yellow
Odor:.....Alcohol
Specific Gravity:.....0.96 g/mL @ 25°C
Flash Point.....>50°C

Storage and Handling:

ReleaSys™ DFX should be stored in a well-ventilated area which is cool and dry. Do not expose to freezing temperatures. ReleaSys™ DFX should not be used at temperatures above 280 °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™ DFX 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.

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