

ReleaSys™ HTF High Temperature Release Agent

Description

ReleaSys™ HTF is a specialized, water-based release agent specifically designed for high temperature molding operations. This formula utilizes a proprietary PTFE resin to achieve unmatched lubricity and mold release performance. The inert and non-wetting nature of ReleaSys™ HTF particles make it an excellent surface coating for molds used to produce high temperature polymer films and thermoplastics. Benefits include:

- Water-based; VOC-free formula
- Enhanced surface adhesion and durability
- High Temperature Stability up to 716°F (380°C)
- Inertness to nearly all industrial chemicals
- Lowest coefficient of friction

Applications

- Mold Release for High Temperature and Difficult to Mold Polymers and Composites
- Mold Primer/Sealer for High Temperature Mold Operations
- Surface Coating for High Temperature Surfaces
- Barrier Coating for Aggressive Environmental processes
- Specialty Lubricant for Drawing and Working Processes

Recommended Application Procedure

1. Clean surface thoroughly. Mechanical cleaning such as bead media blasting or steel wool, followed by chemical cleaning, provides the best surface for application. Removal of all previous contaminants is critical.
2. Lightly swirl ReleaSys™ HTF, making sure to re-disperse all particles prior and during use. Mold temperature would ideally be above 120 °F prior to application. Apply approximately 8-10 inches away from surface and apply a light coat. NOTE: Material will apply wet and transparent but will dry to a light white coat.
3. Allow to dry completely and lightly buff the surface to remove any overspray and to check for adequate coverage. If any rough surfaces are felt, reapply an additional coat.
4. If using as a dry lubricant or barrier, allow to dry and then apply one additional coat to guarantee uniform coverage.
5. **Dilution:** The product can be diluted using DI water to the desired concentration. Shelf-life stability will be lowered, and dilution should be performed as needed.

Heat Curing Procedure

1. Typical processing temperatures are as follows: application at room temperature, drying at 110 to 120 °C (230 to 248 °F), surfactant removal at 250 to 270 °C (482 to 518 °F) and eventually sintering (melting) at 360 to 380 °C (680 to 716 °F). The exact settings will depend on the particular process conditions, such as speed and loadings.

Physical Properties:

Primary Polymer	Fluoropolymer Resin
Appearance	White particle suspension
Odor	None
Specific Gravity	1.13 g/mL @ 25°C
Flash Point	None

Safety Data Sheet (SDS) is available upon request.

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.