



Product Information

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ReleaSys™ HT High Temperature Release Agent

Description

ReleaSys™ HT is a specialized, water-based release agent specifically designed for high temperature molding operations. This formula utilizes a proprietary boron nitride complex to achieve unmatched lubricity and mold release performance. The inert and non-wetting nature of ReleaSys™ HT particles make it an excellent surface coating for molds used to produce castings of light metals such as magnesium and for coating surfaces in glass making operations. Boron Nitride can inhibit corrosion and chemical attack in metal forming, glass-making and sintering processes, thereby increasing die life and improving product quality.

- Water-based; VOC-free formula
- Enhanced surface adhesion and durability
- High Temperature Stability up to 1562°F (850°C) in air; 3272°F (1800°C) in Inert Atmospheres
- Low Dielectric Constant and Loss (ideal for MAG/MIG welding nozzles coating)
- Excellent Thermal conductivity
- Low coefficient of friction

Applications

- Mold Release for High Temperature and Difficult to Mold Polymers and Composites
- Mold release for Casting Metals and Glass
- Mold Dressing for Powder Metal Processing
- Surface Coating for High Temperature Surfaces
- Barrier Coating for Aggressive Environmental processes
- Specialty Lubricant for Drawing and Working Metals

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 of Boron Nitride. Removal of all previous contaminants is critical.
2. Agitate or mix ReleaSys™ HT thoroughly prior to use. Make sure to re-disperse all particles prior and during use. Mold temperature would ideally be above 180 °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 fine-white coat.

NOTE: Application to a unheated surface will require longer dry times, typically 15-30 depending on ambient temperatures and humidity.
3. Allow to dry completely. Heat mold ensure complete drying and to allow boron nitride to adhere to surface. Apply 1-3 coats and repeat heat cycle to maximize release performance. If using as a dry lubricant or barrier, allow to dry and then apply 1 additional coat to guarantee uniform coverage.

Physical Properties:

Primary Polymer:.....Discrete Ceramic particle
Appearance:.....White particle suspension
Odor:.....None
VOC:.....None
Specific Gravity:.....1.0 g/mL @ 25°C

Safety Data Sheet (SDS) is available upon request.

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For technical information call 800.992.2424 or 203.743.4447

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