

# DuPont™ TraSys™ 414

## Mold Release Coating

### Description

TraSys™ 414 heavy-duty mold release coating is a translucent, water-based dispersion for rotational molding applications. When applied to a mold, it exhibits outstanding release or antistick properties and has a very low coefficient of friction. It is clean, nonoily, nonstaining, chemically inert, and can function in temperatures to 260°C (500°F) or higher.

TraSys™ 414 will meet molders' production, environmental, and safety requirements. It offers an unmatched combination of lubricity and durability, without the use of silicone oils, providing consistent release and reducing mold buildup. TraSys™ 414 is solvent-free, meeting all existing and anticipated environmental regulations. Additionally, TraSys™ 414 contains no alcohols that may form flammable vapors.

### Uses

TraSys™ 414 heavy-duty release is ideal for rotational mold parting lines and removable pins and inserts or cores and projecting areas that molded plastic forms around and causes difficulty in demolding.

### Directions for Use

TraSys™ 414 must be agitated before use. TraSys™ 414 mold release coating should be applied to clean and dry surfaces. For maximum results, preheat the mold surface to 55–60°C (130–140°F) before application.

### Recommended Procedure

1. Clean mold thoroughly, using glass or plastic bead media, abrasive pads, and cleaning solvent or high pH detergent, to remove all prior mold release and other sources of contamination.
2. If spraying, use spray equipment that provides a fine mist. When wiping, lightly dampen a clean cloth with TraSys™ 414 after agitation. After agitation, apply lightly to the mold's surfaces, making certain that all areas of the mold are entirely coated.
3. A minimum inner mold temperature of 132°C (270°F) is recommended to cure the release. This can easily be accomplished after application by running the mold empty through a full production cycle with the oven temperature at 170°C (350°F). Proper curing will give a bond between mold and coating that will ensure no transfer of coating to the first molded part, as well as ensure the most effective coating for durability and cycle life.
4. When spot touch-ups are applied, curing the freshly coated area with a heat gun will further enhance the bond between the coating and the mold's surface. Larger applications may require a bake cycle as described above.

### Typical Properties

Primary Polymer: Thermoset Polysiloxanes  
Specific Gravity: 1.0  
Odor: Slight  
Color: White  
Flash Point: None



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## Storage and Handling

TraSys™ 414 should be stored in a cool, dry, well ventilated area. Do not expose to freezing temperatures. Freezing will affect the physical condition, but will not damage the release effectiveness. Thaw at room temperature, and mix well before using.

Containers in use should be agitated before use and often during use. Drums will require a low rpm agitator to prevent phase separation in the storage container.

Breathing vapors should be avoided. If spraying, care should be taken to avoid inhaling mist or vapors, just as sprayed paint inhalation should be avoided.

Care should be taken not to expose TraSys™ 414 mold release coating to open flame or intense heat. Temperatures above 260°C (500°F) may cause chemical breakdown, resulting in toxic fumes. Always wash hands after handling TraSys™ 414 mold release coating.

## Shelf Life

TraSys™ 414 has a shelf life of 6 months from the date of shipment.

## Packaging

TraSys™ 414 is available in 1-, 5-, and 55-gal containers. Larger volume orders may be packaged in specialty containers.

## Shipping Limitations

None

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**For more information or technical assistance, call: (800) 441-9503**

**or visit us on the Web: [www.dupont.com/releasesystems](http://www.dupont.com/releasesystems)**

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Or call the Coating & Release Systems hotline in the **United States** at (800) 441-9503,  
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