



JR TECHNOLOGY  
LIMITED

REINFORCED PLASTICS & COMPOSITES  
PRODUCTION ENGINEERS

DRY FILM RELEASE  
TYPE 450

JRTL Dry Film Release Coating will give you a release performance second to none. Every requirement of the moulder has been considered in the selection of this product resulting in many benefits.

### **Effectiveness**

The polymer film created by the Release Agent provides superb release characteristics over & over again. Its high temperature performance (up to 270°C) & negligible transfer make it an ideal product for the all applications, including Vacuum Resin Transfer/Infusion techniques. The coating is approved by Boeing & Deutsche Airbus.

### **Applications**

The coating can be applied either by brush or spray & is based on a modified fluorocarbon, which is self-bonding. This makes it ideal for:

- Mould release
- Fabric/film coating

To obtain the ultimate release characteristic that you are seeking a number of 'bake on' coatings may be necessary. The coating has excellent lubrication properties, this aiding the forming of difficult contours.

### **Economics**

Multiple releases from one application greatly reduces down times & the quantity of material used. There is also no need to clean the moulds from build up of Release Agent or clean the finished item prior to painting, finishing or subsequent processing.

### **Environmental**

This products contains no CFC's or Aromatic Hydrocarbons.

### **Health & Safety**

Care should be exercised when handling all solvent based material to ensure that application areas are well ventilated & no naked flame or extreme high temperatures are nearby. Do not smoke during application.



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TECHNICAL DATA

J R TECHNOLOGY LIMITED Dry Film Release Coating Type 450 should be used for applications where rapid curing, high gloss & slip properties are required & for high volume surface porosity of moulds.

### **EFFECTIVENESS**

This product is neither silicone, wax nor PVA, but a highly reactive polymer which forms an extremely hard, thin film, giving the following benefits:-

- Multiple release
- Release @ temperatures up to 475°C
- No mould build-up
- No transfer onto mouldings
- Labour saving due to multiple release
- Lower mould maintenance costs
- Checked according to AMS 3091 A & B

The coating can be applied either by wiping, brush or spray, at temperatures between 15-60°C. To begin application:-

- (1). Make sure that the mould is clean & free from dust. Apply 1-2 coats of Mould Sealer Type 450 MRS, allowing 3-4 hours between coats & preferably stand over night before application of the top-coat.
- (2). Apply 4-6 coats of the Dry Film Release Coating Type 450 to the mould, waiting up to 5 minutes between coats & 10-15 minutes after the last coat (to allow the solvents to dry off completely). To improve the performance of the release system, heat the mould to 40-60°C for 15-20 minutes & then apply the coats of Dry Film Release Coating Type 450. Always take care to obtain a uniform film.
- (3). To increase the number of releases: when mouldings start, apply 1 coat of release system after the first 2 or 3 mouldings, then continue production until first signs of release difficulty occur. Here a further coat should be applied.

### **TOUCH-UP**

Continuous abrasion during the release will eventually damage the Dry Film Release Coating, resulting in adhesion problems. To repair damage, simply apply 1 coat of Dry Film Release Coating onto the damaged areas.

## **RECOMMENDATIONS**

- (1). Never dilute Dry Film Release Coating Type 450 & Mould Sealer Type 450 MRS with any other product or solvent as they are supplied "ready to use".
- (2). Always use in a well ventilated area, taking care not to inhale the vapours.
- (3). Always use clean, lint-free cloths when applying, using a wiping technique.
- (4). For higher gloss finish wipe gently after each coat to polish the film.
- (5). When Dry Film Release Coating Type 450 & Mould Sealer Type 450 MRS is stored in a sealed container it has a shelf life of 12 months, but it must be used within 3 months after the container is opened.

Health & Safety Data Sheets are provided separately.