

Chemlease® MPP117

Mold Prep and Primer

Description

Formulated for sealing tooling in both the FRP and the advanced composites sectors. Appropriate substrates include polyester gel-coat and non-gel-coat; epoxy and phenolic mold surfaces, as well as most metals. Chemlease® MPP117 is not recommended for sealing monolithic graphite or ceramic tooling.

General

Chemlease® MPP117 should be applied onto a clean mold surface.

Chemlease® MPP117 is an excellent sealing material, but should not be used as a mold release agent. It has the ability to enhance the performance of semi-permanent release agents. In many cases, it has also been used as a means of re-surfacing a worn out mold. The appropriate Chemlease® release agent should be applied on top of the product after the it has been cured.

Mold Preparation

1. After the mold has been buffed and polished with rubbing and polishing compounds, wash the mold surface thoroughly with clean water. The proper water wash will remove all fillers and water-soluble components contained in the buffing and polishing compounds. Use liberal amounts of water. Wipe dry with clean cotton cloths.
2. Following the water wash, apply Chemlease® mold cleaner to remove all traces of solvent-soluble components such as waxes, silicones, oils, etc. Use liberal quantities of mold cleaner, in a well ventilated area, and wipe dry with clean cotton cloths until mold is "squeaky clean" by thumb or hand rub test.
3. The wiping cloth should be changed regularly to ensure that a clean, absorbent surface of the wiping cloth is always presented to the mold surface. This procedure prevents recontamination of the mold surface by wiping cloths, which carry contaminants lifted from the mold.

Application: Class "A" Finish Molds

1. Apply Chemlease® MPP117 by wiping. Use clean, soft cotton cloths. A wipe on/wipe off technique is recommended, applying to an area of about four square feet at a time. Care should be taken on large structures to ensure that the overlap area is as small as possible, and that the product on the area overlapped has not already cured. Generally, 1 or 2 wipe on/wipe off coats are sufficient to seal. Allow 30 minutes between the application of each coat. Following application of the final coat, allow a 1-2- hour cure time at room temperature. The cure time may be reduced to ten to fifteen minutes by heating the mold with the applied Chemlease® product at a temperature of 120-140°F/ 49-60°C.
2. When the product has cured, apply the select Chemlease® mold release. Please refer to the proper Technical Data Sheet instruction for mold release application details.

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Application: Polyester Non-Gel-Coat and Composite (epoxy and phenolic) Molds

1. Generally, a "Class A" finish is not required for non-gel-coat mold surfaces. If this is the case, simply wipe on the product. (The wipe-off step can be eliminated.) One or two coats of the product should suffice. If multiple coats are applied, allow 30 minutes between the application of each coat. Following application of the final coat, allow a 2-4 hour cure time.
2. When the product has cured, apply the proper Chemlease® mold release as recommended. Please refer to the proper Technical Data Sheet instructions for mold release application details.

Touch-Up Coats

Touch-up coats are not possible once this product is applied and cured, since a release agent needs to be applied over the top of it before the mold can be used in production.

Cure Test

Under the best conditions, the Chemlease® MPP117 has been found to cure in as little as one hour. A simple test method for complete cure is: Apply one drop each of water and a Chemlease® mold cleaner onto a flange area that has been coated with the product. Wait a few seconds and wipe off with a clean cloth. If there is no evidence of the drops on the tool surface the product is completely cured.

Important

The recommended number of coats and cure times are a general guideline found to be more than sufficient in a broad spectrum of molding conditions. When molding products with extreme geometries or experiencing low-humidity conditions in the shop, the customer may find the need to extend the cure time between coats and increase the number of coats applied to the mold. The efficiency of a release film is best determined through a combination of tape tests and experimentation.

Storage

Do not store at temperatures above 100°F/38°C. Keep container tightly sealed after each use to prevent evaporation and/or moisture contamination. Chemlease® MPP117 is flammable. Keep away from heat, sparks, flames and combustion sources during storage and use.

Packaging

Chemlease® MPP117 is available in 1, 5 and 55-gallon containers.

Safety Data

Wear the appropriate protection equipment when applying this product. We believe that Chemlease® MPP117 has a low degree of hazard when used as intended. For more information, request a copy of the MSDS.

While the technical information and suggestions for use contained herein are believed to be accurate and reliable, nothing stated in this bulletin is to be taken as a warranty either expressed or implied.