

**PRODUCT DATA****Chemlease® 1370**

## Semi-Permanent Release Agent

**Description**

Chemlease® 1370 is a Rapid-Cure, semi permanent mold release system developed specifically for the polyester molding industry. The unique formulation allows Chemlease® 1370 to be sprayed on with conventional equipment, which will drastically reduce application time on most molds. Chemlease® 1370 may also be wiped on.

**Benefits**

- Easy to apply - No streaking or hazing
- Spray application requires no cure time between
- Does not build up on the mold surface application coats
- Reduces labor time and costs
- Virtually no transfer to molded part
- Multiple releases
- Provides excellent gloss
- High temperature stability

**Application****Mold Preparation**

1. It is essential that the mold is clean and free of contaminants to optimize the performance of Chemlease® 1370.
2. Warm water wash the mold to be treated. Thoroughly dry.
3. Clean the mold surface at least twice with Chemlease® Mold Cleaner EZ. Seal mold with Chemlease® 15 SEALER. (See Chemlease® 15 Sealer Technical Data Sheet.)
4. Chemlease® 1370 may be applied by spray or wipe.

**Spray On Application For Base Coats**

Chemlease® recommends the use of a Binks Mach 1 spray gun with a gravity feed or two-quart pot. A Binks #89 Tip, and #93 or 95 fan nozzle should also be used. The recommended line pressure in to the pot should be between 40 to 50 p.s.i. The pressure to the gun from the pot should only be two (2) to three (3) p.s.i. The fluid nozzle should be opened only enough to allow for a consistent stream of Chemlease® 1370 exiting the gun.

Other HVLP guns may be used. In general, minimize air pressure, maximize fluid volume, and maximize fan pattern to optimize application of Chemlease® 1370.

**To The Cleaned And/Or Sealed Mold**

1. Apply one coat of Chemlease® 1370, making passes at about three feet per second. Coat the entire mold surface in this manner.
2. Apply total of 3-5 coats to the complete mold surface. No waiting is required between coats.
3. The amount of coats depends on the difficulty of the part being produced.
4. \*If the mold appears greasy, lower the volume of fluid, or double check the pressure to the gun.
5. It is not necessary to wipe the material off of the mold after it has been sprayed on to the mold any overspray or runs may be wiped off with a clean cotton cloth.
6. Avoid touching or contaminating the surface after Chemlease® 1370 has been applied.
7. \*\*Allow the final coat to cure for a minimum of 30 minutes.

**Wipe On / Wipe Off Application For Base Coats**

1. With a clean 100% cotton cloth (we recommend Chemlease® cotton cloth) and wipe on a smooth continuous film. Apply no more than a few square feet at a time.
2. \*While film is still wet, wipe the surface with a second clean dry cotton cloth using a circular motion from the outside, working inwards until film is left dry and clear. No wait time is required between wiping on and wiping off.
3. Repeat above procedures until entire mold surface has been covered.
4. When wiping, allow Chemlease® 1370 to cure for a minimum of 15 minutes before applying subsequent coats.
5. Apply 3-5 coats allowing each coat to cure for a minimum of 15 minutes before applying the next coat.
6. \*\*Allow the final coat to cure for a minimum of 30 minutes.

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**\*Note:** To remove a smear or streak, simply rub the affected area with Chemlease® 1370, then simply remove the excess sooner than you had before.

**\*\*Note:** Depending on the part being manufactured and the desired performance, cure time can be altered from twenty (20) minutes, to two (2) hours. Please contact Chemlease or your local representative for more information.

### Test to Ensure Proper Application

Attach a small strip of masking tape to different areas of the mold. There should be very little resistance when removing the tape if proper release is applied. Compare to an untreated mold.

### Touch Up Coats

Once in production the release film will begin to wear. Rather than applying a touch-up coat once the parts begin to stick it is better to do preventative maintenance. For example, if trials determine that 20 releases are obtainable between touch-up coats, it is better to re-apply a touch-up coat after every 15 cycles or at the end of every second shift if you are, for example, turning the molds 8 times per shift. The above-described action will keep the molds in production longer and help establish a routine of quality preventative maintenance.

### Coating Patch Repairs

Prior to repairing a patch, make sure the release is removed for 3-4 inches around the area to be repaired. Note: Semi permanent releases must be removed with mild abrasion as well as a solvent wipe. If not, the patch will not bond to the surface and “break out”. Once the patch is cured, treat the area as a new mold:

1. Warm water wash - no detergent is necessary.
2. Clean with Chemlease® Mold Cleaner EZ two times or more to remove compounds, etc.
3. Apply one coat of Chemlease® 15 Sealer and cure per instructions.
4. Apply 5 coats of Chemlease® 1370 and cure.
5. Touch up the patched area with Chemlease® 1370 every other cycle for the first 4-6 releases.

Remember, the patch is weaker than the rest of the mold and will require extra attention for the first few cycles. Further, a touch-up coat (other than patch repair) should usually be done over the whole mold. This prevents

having to re-touch another area that is wearing on the next cycle.

### Important

The recommended number of coats and cure times are a general guideline found to be more 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

It is important that the materials be left in the factory containers, as the product is susceptible to moisture contamination if the container is left open or the material is stored in the wrong type of container. The material should always be clear. If cloudiness is detected, contact a Chemlease technical representative. Storage stability in unopened containers is 12 months.

### Handling

We believe Chemlease® 1370 has a low degree of hazard when used as intended. For more information, request a copy of Chem-Trend's Material Safety Data Sheet.

### Packaging

Chemlease® 1370 is available in containers filled with 0,73 kg ; 3,6 kg and 12,8 kg.

### Further Information

Request information on our complete range of materials for this industry.

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