AXEL
PLASTICS RESEARCH LABORATORIES, INC.
MOLD RELEASES & PROCESS ADDITIVES

50 Cambridge Drive, Monroe, CT 06468

Phone: 718-672-8300 • Fax: 718-565-7447
E-mail: info @axelplastics.com

www.axelplastics.com

Technical Data Sheet

XTEND™
Semi-Permanent Mold Releases

850

Product Description
External mold release: An air-drying reactive resin solution that cures to provide a durable semi-permanent coating. Permits multiple releases without transfer at both ambient and elevated temperatures.

Composition
Proprietary resin solution comprising modified siloxane-based polymers which crosslink and form a release film upon evaporation of the solvent carrier.

Handling
MOISTURE SENSITIVE. KEEP TIGHTLY SEALED.
Minimize exposure to atmosphere.
Do not return exposed material to can.
Store above freezing and below 100ºF/38ºC.
DO NOT DILUTE

CAUTION: Do not apply to hot molds (over 300ºF/148ºC)

Features
HVLP application
Fast and easy to apply
Gives high gloss for Class A finish parts
No polishing required
HAPS free

Uses
Specifically designed for FRP molders who prefer to spray on release.

Typical Properties

Effective Ingredients	<5%
Color	Straw
Specific Gravity	0.720 @25˚C
Flash Point	<73°F / <23°C (C.O.C.)
Shelf Life	12 months in unopened/original container
Solvents	Aliphatic Hydrocarbon Blend

Mold Preparation
New & Green FRP Molds:
Read AXEL publication FocusOn New & Green Molds.
Conditioned & Metal Molds:
Mold surfaces should be clean and free of previously used mold releases and other surface contaminants.

Application Instructions
1) Immediately before molding, make sure that the mold is dust free. Spray 850 using a High Volume Low Pressure type spray gun, such as those by Binks, AccuSpray, or DeVilbiss. The release should go on wet without puddling.

Recommended settings:

Pot Pressure - < 5 psi
Air Pressure - < 40 psi
Fluid nozzle = Binks #94
Air nozzle = Binks #95P or 93P

2) Strokes should overlap slightly to assure complete coverage. Adjust air and liquid controls to provide a light, uniform film, the film should be visible as a wet coating for 6 – 12 inches behind the spray application. Keep the spray nozzle @ 6 – 10 inches from the mold surface. An air pressure setting in the 30 – 40 psi range should reduce any fogging effect. Adjust air and liquid controls to maintain a uniform spray pattern, lower air pressure produces a wetter film that is easier to see and may be useful in applying to more difficult areas of the mold surface.

3) Spray successive coats of release, working each coat at a right angle to the previous one to cover the entire mold surface. For those deep or complicated surface areas where spraying can be difficult we definitely recommend wiping on 1 – 2 coats of 850. Apply with a clean, woven, lint free cloth, such as the Scott Shop Towels On A Roll®, Kimberly-Clark WorkHorse® rags or WypAll® wipes, or a heavy-duty plain white paper towel, followed by the spray application. It is always a good idea to wipe on the initial coat of 850 to assure even coverage of the mold surface.

4) 4-5 coats are recommended although new or porous tooling may require as many as 6 coats. Typically, 1 gallon of 850 will cover an area of 200 – 250 sq. ft on a seasoned mold. Allow each coat to flash dry before applying the next coat. It is always a good idea to apply an extra coat or two to high wear areas where shear forces or abrasion will most impact release performance. Following your final coat of 850 allow 30 minutes for the release to cure before using the mold. Hot and humid conditions can affect the drying time of the spray and may require adjustment of settings to insure a uniform spray.

5) When spraying a large mold that requires walking on the surface, apply the release to a section at a time. Apply all of your coats and allow the 30 minutes cure time before moving on to the next section.

* Due to the unique properties of this material, we require a clean closed application container. The container we find best suited, is a HDPE bottle with a shampoo squeeze style cap, where only a small amount of air is transferred. Gallons should be transferred into the type of container described above. At your request we can supply a sample and source. Drum quantity customers are required to use a desiccant drier attachment to assure proper release performance.

Maintenance & Touch-up

Promptly touch-up any areas, which are difficult to release or subject to abrasion. If no residue is present, simply apply more XTEND 815. If there is minimal buildup, clean the mold by lightly wiping with a cloth that is just damp with CX-500 and then apply additional coats of release.

070507