



PLASTICS RESEARCH LABORATORIES, INC.
MOLD RELEASES & PROCESS ADDITIVES

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Technical Data Sheet



W-455HP

Product Description

An air-drying, water-based, release agent that cures to provide a durable semi-permanent release coating. Provides multiple releases at both ambient and elevated temperatures. Ideal for production of difficult to release thermoset parts. Can be buffed to a high gloss finish with a micro fiber cloth.

Composition

Aqueous emulsion of proprietary resins and crosslinkers with various surfactants.

Handling

Keep container closed when not in use.
Store above freezing and below 100°F / 38°C.
DO NOT DILUTE

Features

Water-based
Non-flammable
High Slip
High gloss if buffed
w/microfiber

Uses

XTEND-W-455HP is recommended for the release of epoxies, polyester, vinyl-ester phenolics, and most other thermosets. Especially for applications requiring high slip. Will yield a cosmetic finish if buffed with a high quality micro fiber cloth.

If XTEND W-455HP is used for New or Green Composite Molds a sealer is recommended: Apply 1-2 coats of XTEND XTR or AMS mold sealer prior to application of XTEND W-455HP.

Typical Properties

| | |
|-----------------------|--|
| Effective Ingredients | 8.4% |
| Color | white |
| Specific Gravity | 1.001 |
| Flash Point | Non-Flammable |
| Shelf Life | 12 months in unopened/original container |

Mold Preparation

Mold surfaces should be clean and free of previously used mold releases and other surface contaminants.

APPLICATION:

Apply with a clean, paper towel, such as the Scott Shop Towels On A Roll or a heavy-duty plain white paper towel or cotton cloth. Saturate the towel with release until it is wet but not dripping. Wipe on to the mold surface using smooth even strokes. A circular application motion is suggested until the W-455HP is evenly wet-out on the mold surface.

For high gloss applications, lightly buff the surface using a microfiber towel within 1-2 minutes of application. When the gloss is not important, the W-455HP can be wiped off with a paper towel or cotton cloth.

When working on a large surface area, apply to one section at a time, working from one end of the tool surface to the other. 2 coats of release are recommended for a clean, well-conditioned tool.

Allow a minimum 15 minutes for each coat of release to dry and cure before applying the next coat. Low ambient temperatures (below 68°F / 20°C) require longer cure times. Always use a fresh, clean towel for each coat of release. Please allow at least 30 minutes cure time after the final coat is applied. Longer cure times will provide more parts before reapplication is needed.

To maximize productivity, a break-in procedure can be beneficial. A good method is to apply a light re-wipe of release to the entire mold surface following the first pull. After the first part, reapply release as needed to sheer edges radius points and high abrasion areas (these may require a more frequent touch up). Reapply to the entire mold as needed.

Removal: Use CX-200HS, followed by a water wipe, and then a high-performance cleaner, such as AXEL's CX-500, CX-501, or CX-502.

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