



PLASTICS RESEARCH LABORATORIES, INC.
MOLD RELEASES & PROCESS ADDITIVES

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Technical Data Sheet



21GP

Product Description

External mold release. A reactive resin solution that cures to a cross-linked semi-permanent coating, which provides multiple release without transfer.

Composition

Proprietary resin 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.

Features

Long-lasting coating
High Temperature Performance
When cured, the coating can be used in applications requiring FDA compliance with provision 21CFR 175.300.

Uses

Designed for Rubber, Thermoplastic, and Thermoset resins processed at temperatures from 480 to 700°F+ including RotoMolding applications.

Typical Properties

Solids	4-6 %
Specific Gravity	0.81 @ 25°C
Flash Point	<73°F / <23°C
Shelf Life	12 months in unopened/original container
Odor	Mild

Mold Preparation

Molds must be thoroughly clean. Use recommended solvents to remove previously used releases. CX-200HS can be used to remove semi-permanent coatings. For other types of residue, use Clean Wiz –9NC.

Application Instructions

1) Apply from closed container* 1 coat of XTEND 21GP by wiping, brushing or spraying. Apply a smooth, continuous wet film – avoid excessive rubbing of deposited film or streaking will occur. Designed to be best done on an ambient to warm mold under 100°C / 200° F.

2) The number of coats required for a particular application will depend on the porosity of the mold, but a minimum of three coats of the XTEND 21GP is recommended. At least 15 minutes should be allowed between coats for drying.

3) After the final coat of release is dry, cure the release coated mold for 1 hour at least 400°F/200°C. It will cure faster at higher temp. (for example, at 450°F/232°C , it will comparably cure in about 20 minutes), However, longer times at higher temperatures will result in longer-lasting performance. Curing at or above the operating mold temperature will result in the best performance

* 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

If scumming or sticking begins: Wipe the problem area mold with XTEND 21GP to dissolve and remove residue. Continue molding. If the residue does not dissolve, lightly work over the tool with a Scotchbright® pad wet with XTEND 21GP then apply one coat of release.

If scumming persists: Wipe off with AXEL's CX-525 cleaner and a Scotchbright® pad. (This cleaner is designed to take off the residual styrene buildup without removing the base coat of release.) Then wipe on 1 to 2 coats of XTEND 21GP while heating the mold, waiting 10 minutes between each coat.

In extreme scumming conditions: Strip the tool with CX-525, CX-200HS and by buffing the tool. This will remove all scumming, buildup and the release. It will also condition the mold for break-in. Start from step 1 to recondition the mold.

Removal: Use CX-200HS, followed by a water wipe and a good general purpose cleaner, such as AXEL's CX-500.

XTEND, MoldWiz & PasteWiz are registered trademarks of Axel Plastics Research Laboratories.

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