



PLASTICS RESEARCH LABORATORIES, INC.
MOLD RELEASES & PROCESS ADDITIVES

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Technical Data Sheet

MoldWiz®

INT-CPUL-1

**Internal Mold Release
Process Aid Additive**

Product Description

A liquid internal mold release/process aid additive which is incorporated directly into the resin to provide release from the die in pultrusion processing. Will also: improve line speed; reduce pull force; enhance wetting of reinforcements and fillers; and improve the surface appearance of molded profiles. Especially recommended for Crestopol resin with higher ATH filler loadings.

An effective addition of process aid additive will not have any adverse effect on the cured resin or interfere with secondary operations such as printing, painting or bonding of cured parts.

May also be used as an internal mold release in other processes that utilize polyester, vinyl ester and hybrid thermoset resin systems such as SMC/BMC, open molding and wet compression molding.

Composition

A proprietary synergistic blend comprising organic fatty amine and acid derivatives.

Handling

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

Uses

For pultrusion of polyester, and vinyl ester resins.

Typical Properties

Effective Ingredients	100%
Color	Light Amber
Specific Gravity	0.966
pH	4.7
Viscosity	<1500 cps @ 25°C
Shelf Life	1 yr. minimum in original closed container

Instructions for Use

For best results, laboratory tests or pre-production trials should determine the optimum addition level. Typical addition level in polyester or vinyl pultrusion is 35-40 parts/1000 by weight (3.5% - 4.0%) by resin weight (excluding fillers), although small or simple profiles may be achieved with lower addition levels. May also be used together with Axel's INT-PUL-34.

High amounts of filler loadings or more difficult profiles may require higher addition levels. Additional information on conducting pre-production trials is available in AXEL's Technical Guide: Testing IMRs in Thermoset Resins.

Mixing: For polyester or vinyl-ester resins, mix any and all fillers in the resin *prior* to adding the AXEL INT-CPUL-1 lubricant. Typically, the catalysts are added after the lubricant. Also, do not mix the lubricant directly with low profile additives. Any LPA's should be added to the resin and mixed thoroughly prior to adding the INT-CPUL-1 lubricant.

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05/23/2013