

## technical data



PLASTICS RESEARCH LABORATORIES, INC.  
MOLD RELEASES & INTERNAL LUBRICANTS

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# MOLD WIZ INT-3944

**General:** A process aid additive with anti-static properties which is incorporated directly into the resin eliminating the need for an external mold release agent. FRP molds require a surface coating to seal the porosity and maintain the gloss. An effective addition of process aid additive will not have any adverse effect on the cured resin. Thermoplastic molded parts will be stress-free and thermoset parts may have improved Barcol hardness. The complex polymeric nature of the process aid additive will not interfere with secondary operations such as decorating, silk screen printing, painting, bonding or plating.

**Use:** Thermoplastics  
Thermoset Polyester

**Composition:** Proprietary synergistic blend of organic fatty acids, esters and amine combined with wetting agents.

### TYPICAL PROPERTIES:

<b>EFFECTIVE INGREDIENTS:</b>	<b>100%</b>
<b>SOLIDS:</b>	<b>100%</b>
<b>*COLOR:</b>	<b>Amber</b>
<b>SPECIFIC GRAVITY:</b>	<b>0.950 @ 25°C</b>
<b>VISCOSITY:</b>	<b>150 –250 cps @ 25°C</b>
<b>pH:</b>	<b>4.5 – 6.5</b>
<b>REFRACTIVE INDEX:</b>	<b>1.460</b>
<b>FLASH POINT:</b>	<b>300°F / 149°C</b>
<b>SHELF LIFE:</b>	<b>Minimum of one year</b>

\* The color may change over time from light to dark amber without effecting product performance.

### Application Instructions:

**General:** For best results, laboratory tests or pre-production trials should determine the optimum addition level. MOLD WIZ Process Aid Additives are effective within a range of 1 to 10 parts per 1000 resin or rubber by weight, excluding reinforcements, pigments and fillers. High amounts of filler may require a higher percentage of process aid additive than the indicated maximum. Always start an evaluation at 5 parts per 1000 (0.5%). In thermosets, too much process aid additive may retard the cure. Reduce the level of additive or slightly increase the catalyst. In thermoplastics, the process aid additive may increase the MFI. Reduce the level of additive, or reduce the process temperature to raise the resin viscosity and to eliminate screw slippage.

**Mixing:** For two-part thermoset resins, mix the process aid additive in the less viscous or less reactive side before catalyzing. For thermoplastics, dry blend the process aid additive by tumbling, or use an additive dispenser to meter directly into the resin stream. Process aid additives may be compounded into the resin to make a masterbatch.

All information given by us about our products is based upon our tests and experience. It is intended for use by persons having technical skill at their own discretion and risk, and we assume no liability in connection with their use.

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