

## technical data



PLASTICS RESEARCH LABORATORIES, INC.  
MOLD RELEASES & INTERNAL LUBRICANTS

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# MOLD WIZ

## INT-NPE-12

**General:** An internal lubricant/process aid with anti-static properties which is incorporated directly into the resin. Eliminates the need for an external mold release agent. Improves resin flow, improves dispersion of other resin additives (reinforcements, fillers, and pigments), shortens cycle times, reduces temperatures and pressures of molding machines, and reduces or eliminates weld/knit lines. An effective addition of internal lubricant will not have any adverse effect on physical properties or secondary operations such as decorating, printing, bonding, or plating.

**Use:** Nylon Polyamide-Imide  
Nucleated Polypropylene  
Polycarbonate

**Composition:** Proprietary condensation product of synthetic resins, glycerides and organic acid derivatives in an intimate combination with otherwise modified fatty acids.

### 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>0.940 @ 25C</b>
<b>VISCOSITY:</b>	<b>140 - 200 cps @ 25C</b>
<b>REFRACTIVE INDEX:</b>	<b>1.4705</b>
<b>FLASH POINT:</b>	<b>290°F / 143°C (C.O.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 internal lubricants are effective within a range of 1 to 10 parts per 1000 resin excluding reinforcements, pigments and fillers. A high amount of filler may require a higher percentage of internal lubricant than the indicated maximum. Always start an evaluation at 5 parts per 1000 (0.5%). The internal may increase the MFI. Reduce the level of internal or reduce the process temperature to raise the resin viscosity and to eliminate screw slippage.

**Mixing:** Dry blend the internal by tumbling or use an additive dispenser to meter directly into the resin stream. Internals 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.