



MoldWiz® INT-619 is a proprietary process aid additive, comprised of a synergistic blend of modified polymers and waxes. The product is available as a 100% active pellet, or as a free flowing powder.

INT-619 may be dry blended into the resin mix by tumbling; metered with an additive feeder; fed at the throat of the processing equipment; or utilized in a masterbatch. Typical addition range for injection molded polymers is 0.3%, although the additive may be loaded at 0.1% up to 1% by weight. Higher loading are recommended for highly filled resins, or when the objective is scratch resistance.

The addition of MoldWiz INT-619 will not cause hydrolysis in polycarbonate and polycarbonate resin blends.

#### CASE HISTORY #1

A manufacturer of high quality consumer electronics injection molds PC/ABS housings. To improve the scratch resistance of these parts, the manufacturer currently uses a secondary coating. Recently, several additives were evaluated to determine if using one of these might eliminate the application of the scratch resistant coating.

Three additives were tested: Tegopren 6846 and Tegomer M-Si 2650 (both from Evonik) and MoldWiz INT-619 from AXEL. While all three products improved scratch resistance, only AXEL's INT-619 provided improved scratch resistance without detrimental effects on the mechanical properties. Both of the Evonik additives had a negative impact on surface hardness and tensile performance.

#### CASE HISTORY #2

A masterbatch producer has recently validated the benefits of MoldWiz INT-619 in PC and PC/ABS blends produced for his customers. The incorporation of INT-619 in a PC/ABS masterbatch improved resin flow and resolved flow marks and splay that was occurring in injection molded parts.

In a second resin formulation INT-619 was used for PC sheet production to enhance scratch resistance and to make it easier to remove protective masking. Migration and volatility of the additive was of particular concern in this application because the PC sheets are thermoformed by the end users. INT-619 has low volatility at typical thermoforming temperatures, so PC sheets that were formed with INT-619 did not exhibit any blooming of residual additive.

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Axel Plastics Research Laboratories, Inc  
Box 77 0855 Woodside, NY 11377 USA  
Ph: 718-672-8300 Fax: 718-565-7447  
E-mail: [info@axelplastics.com](mailto:info@axelplastics.com)  
Web: [www.axelplastics.com](http://www.axelplastics.com)

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