## <u>New Process Aid Additive Improves Color Consistency</u> and Increases Throughput in Automotive Parts Manufacturing

## Axel's MoldWiz INT-435PAD Proves Processing Capability for ASA/PC Alloy

Woodside, NY, USA – MoldWiz INT-435PAD, a new process aid additive from Axel Plastics Research Laboratories, Inc., improves color consistency and enhances throughput in the manufacture of plastic automotive parts.

This new additive was designed to improve dispersion of fillers and pigments during the extrusion process, while also increasing product flow.

In particular, MoldWiz INT-435PAD has proven extremely beneficial in the processing of ASA/PC alloy (acrylonitrile-styrene-acrylonitrile + polycarbonate), a key plastic used to make auto parts. Traditional production (without the additive) of exterior auto parts yields many parts exhibiting color inconsistencies such as swirls and shadows, the result of poor color dispersion. Many parts are rejected on this basis. In addition, poor release of parts from the mold cavities has also been a source of production losses.

To remedy these problems, 0.5% (5g per kg resin) of MoldWiz INT-435PAD is added to a masterbatch with pigment, and processed at  $425^{\circ}$ - $464^{\circ}$ F ( $220^{\circ}$ - $240^{\circ}$ C). The masterbatch is then used in the base resin, achieving uniform color, and facilitating good fill and easy ejection from the mold.

INT-435PAD increases extruder throughput by reducing screen pack and providing easy flow properties, particularly in heavily filled (70%-80% filler loading) resins," said Nancy Teufel, Technical Support Manager for Axel. "When we formulated INT-435PAD we started with the properties of our best dispersion aid and then added enhancements that would improve flow and release."

MoldWiz INT-435PAD is a proprietary complex mixture of unsaturated fatty esters and organic acid derivatives. The product is available in powder or a 100% active pellet, making it easy to masterbatch or to simply dry blend and feed.

MoldWiz INT-435PAD is just one of the many process aid additives manufactured by AXEL. The 63-year-old, ISO 9001 registered company, also manufactures proprietary mold releases for all types of plastic and rubber processing.

All of AXEL's products are formulated from raw materials that comply with the chemical substance inventory lists of TOSCA, DSL, MITI, EINECS, Australia and Korea. Customers are served both through direct sales and by a network of 32 stocking distributors located in 25 countries around the globe. AXEL encourages requests for evaluation samples by visiting the company's web site at: <u>http://www.axelplastics.com</u>.

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For further information, technical data sheets or for the name of a representative in your area, please contact Nancy Teufel at Axel, Box 77 0855, Woodside, NY 11377 (USA), toll free 800-332-Axel (2935) or 718-672-8300, email: <u>info@axelplast.com</u>.

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## **Caption:**

MoldWiz INT-435PAD has proven beneficial in the processing of ASA/PC alloy (acrylonitrilestyrene-acrylonitrile + polycarbonate), a key plastic used to make auto parts – including auto trim and side view mirrors. It is added 0.5% (5g per kg resin) to a masterbatch with pigment, and processed at  $425^{\circ} - 464^{\circ}F$  ( $220^{\circ}C - 240^{\circ}C$ ) to achieve uniform color and facilitate good fill and easy ejection from the mold.

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