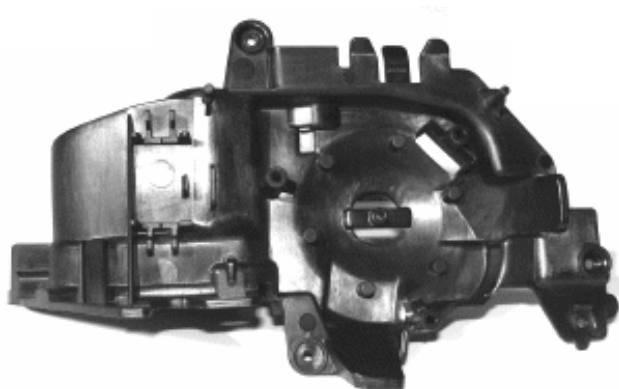


Case Study

Durethan® BKV 50 H2.0 EF for mirror baseplate



ASP2 mirror baseplate

Magna Donnelly supplies all major global car makers with interior and exterior mirrors.

Wing mirrors are positioned at the widest extremities of a vehicle. Like all add-on body components, they are designed for minimum air resistance, low noise, maximum dirt resistance and optimum rain runoff.

The baseplate shown in the picture above is located in the mirror housing and supports the hemispherical mirror adjusting drive.

Durethan® BKV 50 H2.0 EF was chosen for this application. This resin is a 50 % glass reinforced EasyFlow grade based on polyamide 6. Despite its high level of reinforcement, the material is almost as easy to process as a standard polyamide with 30 % glass fibers. It offers significantly higher stiffness, a reduced tendency to warp and a lower thermal ex-

Material: Durethan® BKV 50 H2.0 EF

Molder: Magna Donnelly

Industry: Automotive

pansion. Thanks to the low polyamide content, the components have a relatively low water absorption in a humid atmosphere and consequently greater consistency in terms of their properties and dimensional stability.

To ensure optimum vision, the component is required to exhibit particularly good vibration resistance and mechanical load-bearing properties. This is achieved thanks to its high stiffness combined with mechanical strength. The material's toughness ensures a high level of reliability during assembly and resistance to stone chippings in service.

The good resistance of Durethan® BKV 50 H2.0 EF to chemical attack in the form of road salt, cleaning agents, fuels, oils and fats is a further advantage.



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Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling LANXESS products mentioned in this publication. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets (MSDS) and product labels. Consult your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department at LANXESS. For materials that are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer(s) must be followed.

Regulatory Compliance

Some of the end uses of the products described in this brochure must comply with applicable regulations, such as the FDA, NSF, USDA and CPSC. If you have any questions on the regulatory status of any LANXESS engineering thermoplastic, consult your LANXESS Corporation representative or contact the LANXESS Regulatory Affairs Manager.

Regrind

Where end-use requirements permit, regrind may be used with virgin material in quantities specified in individual product information bulletins, provided that the material is kept free of contamination and is properly dried (see maximum permissible quantities and drying conditions in product information bulletins). Any regrind used must be generated from properly molded/extruded parts, sprues, runners, trimmings and/or film. All regrind used must be clean, uncontaminated, and thoroughly blended with virgin resin prior to drying and processing. Under no circumstances should degraded, discolored, or contaminated material be used for regrind. Materials of this type should be discarded. Improperly mixed and/or dried regrind may diminish the desired properties of a particular LANXESS product. It is critical that you test finished parts produced with any amount of regrind to ensure that your end-use performance requirements are fully met. Regulatory or testing organizations (e.g., UL) may have specific requirements limiting the allowable amount of regrind. Because third party regrind generally does not have a traceable heat history or offer any assurance that proper temperatures, conditions, and/or materials were used in processing, extreme caution must be exercised in buying and using regrind from third parties. The use of regrind material should be avoided entirely in those applications where resin properties equivalent to virgin material are required, including but not limited to color quality, impact strength, resin purity, and/or load-bearing performance.

Note:

The information contained in this publication is current as of June, 2009. Please contact LANXESS Corporation to determine if this publication has been revised.

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