
AUTOMOTIVE APPLICATION PROFILE

Headlight Bezel

We understand that in the automotive industry, you need reliable materials that perform to a higher standard. Ascend offers a comprehensive portfolio of engineered plastics for challenging automotive applications. We work with our customers to achieve the very best from our products. That's why we offer a worldwide support network of application specialists and technical experts. Our material knowledge and expertise in automotive systems can help you improve part performance and reduce material usage and cycle times.

Products Used: **21SPM, 22HSP**

Application Description

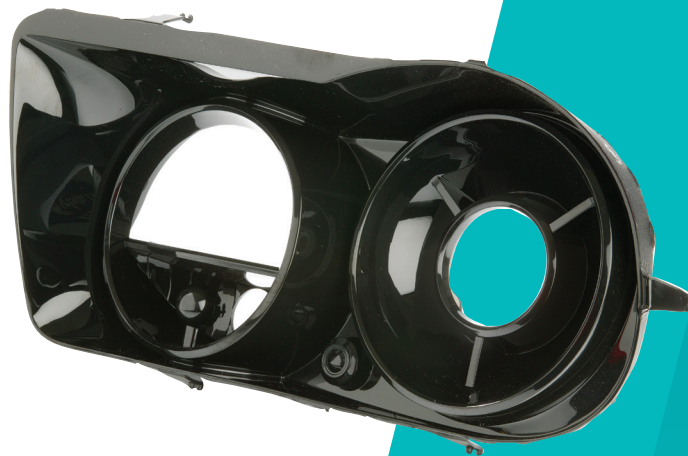
The headlight bezel demands a unique balance of properties, including a smooth surface with no warping. The intense heat generated by headlights can exceed the capabilities of traditional materials like PC and PBT.

The Vydyne Difference

Vydyne[®] 21SPM and 22HSP can be vacuum-metallized without a surface pretreatment. Ascend's Vydyne 21SPM is ideal for this application due to its superior balance of properties allowing for part design that meets the demanding headlight environment and still has an outstanding appearance. Vydyne PA66 offers a cost-competitive, high-temperature alternative.

Benefits

- Temperature Resistance
- Warp Resistance
- Superior Mold Flow
- Surface Appearance
- Plate-ability





Product Properties

21SPM, 22HSP				
Property*	Test Method	Units	21SPM	22HSP
Density	ISO 1183	g/cm ³	1.14	1.14
Tensile Stress	ISO 527-2	MPa	88	83
Flexural Modulus	ISO 178	MPa	3,000	2,900
Notched Izod	ISO 180	kJ/m ²	6	5.5
DTUL @ 1.8 MPa	ISO 75-2/A	°C	72	70

*Dry as molded (DAM)

Application Development and Support

Our automotive applications team relies on years of industry experience and CAE support for tooling to help you optimize your system design. For more information, contact our expert applications specialists or visit ascendmaterials.com.



Ascend Performance Materials is the world's largest fully integrated producer of nylon 6,6 resin. We manufacture and reliably supply world-class plastics, fibers and chemicals that are used in thousands of everyday applications such as car parts, electronics and cable ties.

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