

## application profile: headlight bezel



In the automotive industry, you need PA66 products that perform to a higher standard. Vydyne® resins and compounds help you get the most out of every part you produce. For under-the-hood applications, Vydyne products deliver superior chemical and heat resistance. For exterior and interior components, Vydyne offers versatile, reliable and customizable resins. Our quality and consistency make the difference in your production efficiency.

Products Used: 21SPG1, 22HSP

**Benefits:** Temperature Resistance • Warp Resistance • Superior Mold Flow • Surface Appearance • Plate-ability

## **Application Description**

Pictured below is a headlight bezel made with Vydyne 21SPG1. This part is vacuum-metalized after molding to give a reflective surface.

## **The Challenge**

The headlight bezel demands a unique balance of properties, including a smooth surface with no warping. Vydyne 21SPG1 and 22HSP can be vacuum-metallized without a surface pretreatment. The intense heat generated by headlights can exceed the capabilities of traditional materials like PC and PBT. Vydyne PA66 offers a cost-competitive, high-temperature alternative.

## **The Vydyne Difference**

Ascend's Vydyne 21SPG1 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. The Ascend automotive team employed years of automotive experience in creating optimal parts for Chrysler,® Ford,® General Motors® and Toyota.®

For more information, see your Ascend representative or visit www.ascendmaterials.com.

21SPG1, 22HSP				
Property	Method	Units	21SPG1	22HSP
Density	ISO 1183	g/cm <sup>3</sup>	1.14	1.14
Tensile Stress	ISO 527-2	MPa	85	83
Flexural Modulus	ISO 178	MPa	3,000	2,900
Notched Izod	ISO 180	kJ/m²	5.5	5.5
DTUL @ 1.8 MPa	ISO 75-2/A	°C	74	70

\*Dry as molded (DAM)

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