



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:** 21SPF, 41H, 47H

**Benefits:** Lubricity • Elasticity • Superior Strength • Easy to Mold • Stiffness

**Application Description**

Pictured below are various automotive fasteners. These fasteners are used in automobiles produced by all manufacturers.

**The Challenge**

The automotive fastener is a critical component used to assemble many different facets of an automobile. As such, it must have the strength and stiffness to support needed functions. It must also have the lubricity to allow for lower insertion forces. During insertion, the fastener needs sufficient elasticity to deform without breaking. Above all, it must be easy-molding to fill all the fine details of the fastener.

**The Vydyne Difference**

Ascend’s Vydyne is ideal for this application due to its balance of strength and stiffness with good lubricity and elasticity. The ease of molding allows many design features to be added to the part to improve functionality. The Ascend automotive team has years of experience creating optimal parts for Ford®, General Motors® and Chrysler®.

*For more information, see your Ascend representative or visit [www.ascendmaterials.com](http://www.ascendmaterials.com).*

21SPF, 41H, 47H					
Property*	Method	Units	21SPF	41H	47H
Density	ISO 1183	g/cm <sup>3</sup>	1.14	1.08	1.10
Tensile Stress	ISO 527-2	MPa	85	50	60
Flexural Modulus	ISO 178	MPa	3,000	1,750	2,300
Notched Izod	ISO 180	kJ/m <sup>2</sup>	5.5	78	18
DTUL @ 1.8 MPa	ISO 75-2/A	°C	74	58	63

\*Dry as molded (DAM)

