

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.

Product Used: R543

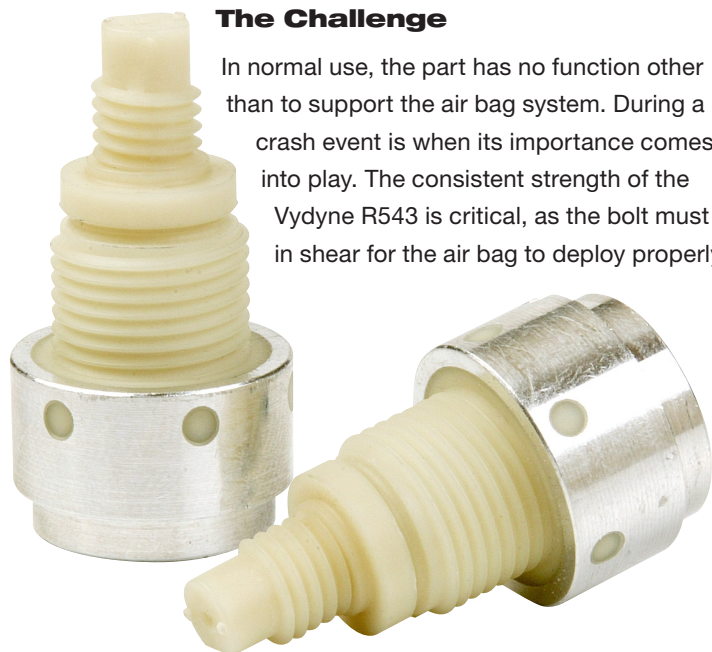
Benefits: Static Load Bearing Capabilities • Consistent Strength • Superior Mold Flow • Adhesion to Metal

Application Description

Pictured are the air bag separation bolts used in a major, North American sport utility vehicle (SUV). After molding and initiation, the bolts are supplied to a major global safety systems manufacturer.

The Challenge

In normal use, the part has no function other than to support the air bag system. During a crash event is when its importance comes into play. The consistent strength of the Vydyne R543 is critical, as the bolt must fail in shear for the air bag to deploy properly.



The Vydyne Difference

Ascend's Vydyne R543 is ideal for this application due to its load-bearing capabilities and consistent strength. Also, the superior mold flow allows the parts to be molded without internal stress that could affect the part's performance. Finally, good adhesion to metal allows the canister base to form an integral bond in molding.

The Ascend Automotive team utilizes mold flow analysis, finite element analysis and years of safety system experience to create optimal parts for Ford®, General Motors®, Chrysler® and Hyundai®.

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

R543			
Property	Method	Units	DAM
Specific Gravity	ISO 1183	none	1.5
Tensile Strength	ISO 527	MPa	225
Flexural Modulus	ISO 178	MPa	12,500
Notched Izod	ISO 180	kJ/m ²	16.5
DTUL @ 1.8 MPa	ISO 75	°C	250