



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: R533H, R530H

Benefits: Wear Resistance • Lubricity • Superior Strength
• Easy to Mold • Stiffness

Application Description

Pictured below is the air suspension piston used in heavy truck applications. The air suspension is designed and developed by a global, tier-one manufacturer of heavy-duty air suspensions. The piston is produced by a major injection molding company.

The Challenge

The air suspension piston is a critical component that must be strong and stiff enough to support the weight of the heavy-duty truck. Since the rubber air spring is moving across the piston, the material must have good lubricity and wear resistance. The ease of molding is critical in achieving a good surface in a heavy part like this piston, as it contributes to the wear resistance.



The Vydyne Difference

Ascend's Vydyne R533H is ideal for this application due to its balance of strength and stiffness. It needs additional wear properties to work with the moving air spring. The ease of molding is also critical in a large part such as this. This solution can work with Ford®, General Motors®, Chrysler® and Toyota®.

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

R533H, R530H

Property*	Method	Units	R533H	R530H
Specific Gravity	ISO 1183	none	1.4	1.37
Tensile Strength	ISO 527	MPa	204	195
Flexural Modulus	ISO 178	MPa	9,700	9,100
Notched Izod	ISO 180	kJ/m ²	12	11
DTUL @ 1.8 MPa	ISO 75	°C	250	245

*Dry as molded (DAM)