

**PRODUCT PROFILE**

# Vydyne<sup>®</sup> High Modulus Ductile PA66 Compounds

Good balance of strength, stiffness, toughness and NVH performance for the most demanding applications

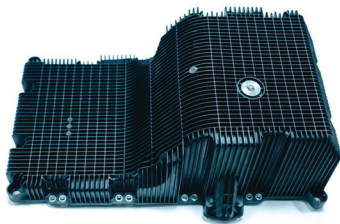
Ascend's Vydyne R433H and Vydyne R435H are fiberglass-reinforced PA66 compounds designed for automotive and non-automotive applications that require a high level of toughness with the lowest compromise of mechanical properties.

These products have excellent low-temperature impact strength and energy absorption making them ideal for use in crash relevant applications. Vydyne R433H has excellent NVH characteristics to dampen structural borne noise and vibrations providing a quieter and smoother ride performance.

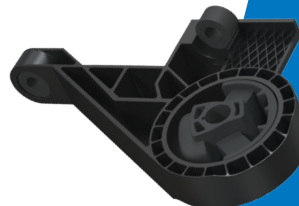
## Applications

Vydyne R433H and R435H are ideal for:

- Crash inserts
- Anti-vibration components
- Oil pans
- Transmission covers
- E-bike wheels
- Battery cages
- All-terrain vehicle and snowmobile components
- Industrial equipment housings
- Sporting goods



For more information, contact our expert applications specialists or visit [ascendmaterials.com](http://ascendmaterials.com).



## Product Properties

<b>R433H BK0746, R435H BK0757</b>				
Property*	Test Method	Units	R433H BK0746	R435H BK0757
Specific gravity	ISO 1183		1.33	1.39
Tensile Modulus	ISO 178	MPa	9,300	11,300
Tensile Strength	ISO 527-2	MPa	147	173
Tensile Strain at Break	ISO 527-2	%	3.2	2.9
<b>Charpy Notched Impact Strength</b>				
@ 23°C	ISO 179	kJ/m <sup>2</sup>	23	18
@ -30°C			15	NA
@ -40°C			NA	14
<b>Charpy Unnotched Impact Strength</b>				
@ 23°C	ISO 179	kJ/m <sup>2</sup>	87	93
@ -30°C			94	NA
@ -40°C			98	98
<b>Heat Deflection Temperature</b>				
@ 1.8 MPa	ISO 75-2/A	°C	245	248
@ 0.45 MPa	ISO 75-2/B	°C	260	260
Suggested injection-molding temperature		°C	285–305	285–305
Suggested mold temperature		°C	65–95	65–95

\*Dry as molded (DAM)



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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