Vydyne® R435H BK0757

PA66-GF35 Ascend

Product Texts

Vydyne R435H BK0757, is designed to reinforce downgauged steel and aluminum used in vehicle body-in-white (BIW) structures, helping reduce weight without sacrificing safety or comfort.

R435H BK0757 has improved energy absorption over traditional glass-filled PA66, helping reduce noise, vibration and harshness (NVH) and absorbing impact energy from crashes. Using the new grade in the BIW structure reinforces sheet metal, helping manufacturers shave substantial weight and improve efficiency. Trends in lightweight and NVH are becoming even more paramount with the growth of Electric Vehicles. R435H BK0757 has excellent properties to support applications where this will be of prime importance such as battery frames and housings.

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**11300 / -**	MPa	ISO 527
[C] Stress at break	**173 / -**	MPa	ISO 527
[C] Strain at break	**2.9 / -**	%	ISO 527
Flexural modulus, 23°C	**10100 / -**	MPa	ISO 178
Flexural strength	**260 / -**	MPa	ISO 178
[C] Charpy impact strength, +23°C	**93 / -**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**18 / -**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**17 / -**	kJ/m²	ISO 180/1A
Izod notched impact strength	**13 / -**	kJ/m²	ISO 180/1A
Temperature	**-40**	°C	-

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**262 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**248 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**260 / ***	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Humidity absorption	**1.38 / ***	%	Sim. to ISO 62
[C] Density	**1390 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Melt temperature	**285 - 305**	°C	-
Mold temperature	**65 - 95**	°C	-
Zone 1	**280 - 310**	°C	-
Zone 2	**280 - 310**	°C	-
Zone 3	**280 - 310**	°C	-
Nozzle temperature	**280 - 310**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets, Black

Additives
Lubricants

Features
Acoustical Barrier Properties

Chemical Resistance
General Chemical Resistance, Solvent Resistance, Oil Resistance

Applications
Automotive, Encapsulation

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific