

Product Texts

Vydyne R435H NT0774, 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 NT0774 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 NT0774 has excellent properties to support applications where this will be of prime importance such as battery frames and housings.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	11200 / 8400	MPa	ISO 527
^[C] Stress at break	185 / 135	MPa	ISO 527
^[C] Strain at break	3.5 / 4.5	%	ISO 527
^[C] Charpy impact strength, +23°C	100 / 110	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	110 / 100	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	19 / 24	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	15 / 16	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	250 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	261 / *	°C	ISO 75-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Electric strength	41 / 36	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.4 / *	%	Sim. to ISO 62
^[C] Density	1400 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets, Natural Color

Additives

Lubricants

Special Characteristics

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

Applications

Encapsulation

Regional Availability

North America, Europe, Asia Pacific