

Product Texts

Vydyne R413H NT is general-purpose, heat-stabilized, impact-modified, 15% glass-fiber reinforced PA66 resin. It is specifically designed to maximize toughness, while retaining physical properties. This product is also lubricated for improved flow and offers superior surface appearance.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	5500 / 4100	MPa	ISO 527
^[C] Stress at break	110 / 80	MPa	ISO 527
^[C] Strain at break	5 / 13	%	ISO 527
Flexural modulus, 23°C	4800 / 2800	MPa	ISO 178
Flexural strength	140 / 73	MPa	ISO 178
^[C] Charpy impact strength, +23°C	80 / 76	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	75 / 70	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	12 / 18	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	6 / 10	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	12 / 21	kJ/m ²	ISO 180/1A
Izod notched impact strength	10 / 10	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-

[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	235 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	258 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	30 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	112 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-

ASTM Data

UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.75	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E7 / -	Ohm*m	IEC 62631-3-1
^[C] Electric strength	3 / -	kV/mm	IEC 60243-1
^[C] Comparative tracking index	500 / -	-	IEC 60112

ASTM Data

Arc Resistance	90 / -	s	ASTM D 495
----------------	--------	---	------------

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.9 / *	%	Sim. to ISO 62
^[C] Density	1210 / -	kg/m ³	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, Natural Color

Additives

Lubricants, Release agent

Special Characteristics

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

Features

Creep Resistance

Chemical Resistance

General Chemical Resistance, Solvent Resistance, Oil Resistance

Applications

Automotive, Electrical and Electronical, General Purpose

Regional Availability

North America, Europe, Asia Pacific