

LNPTM VERTONTM COMPOUND PX06418

PDX-P-00700 HS

DESCRIPTION

LNP VERTON PX06418 is a compound based on Polyamide 6 (Nylon 6) resin containing 35% long glass fiber and proprietary fillers. Added features of this grade are Heat Stabilized and Structural.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber, Proprietary Filler
Polymer Types	Polyamide 6 (Nylon 6)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Exteriors
Building and Construction	Building Component
Consumer	Sport/Leisure, Home Appliances, Commercial Appliance
Industrial	Industrial General

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	203	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.5	%	ASTM D638
Tensile Modulus, 5 mm/min	11960	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	309	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	307	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	10000	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	193	MPa	ISO 527
Tensile Stress, break, 5 mm/min	182	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	10900	MPa	ISO 527
Flexural Strength, 2 mm/min	290	MPa	ISO 178
Flexural Modulus, 2 mm/min	9530	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1040	J/m	ASTM D4812
Izod Impact, notched, 23°C	284	J/m	ASTM D256
Multiaxial Impact	5	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	15	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	64	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	27	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	213	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	208	°C	ASTM D648
CTE, -30°C to 30°C, flow	4.8E-05	1 / °C	ASTM D696
CTE, -30°C to 30°C, xflow	1.1E-04	1 / °C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	213	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	207	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.41	-	ASTM D792
Density	1.4	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	1.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.1 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.4 – 0.6	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	1.7	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	265 – 275	°C	
Front - Zone 3 Temperature	275 – 290	°C	
Middle - Zone 2 Temperature	265 – 275	°C	
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	80 – 95	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	30 – 60	rpm	