

LNPTM VERTONTM COMPOUND MVOOASU

MFX-700-10 HS UV

DESCRIPTION

LNP VERTON MV00ASU is a compound based on Polypropylene (PP) resin containing 50% long glass fiber. Added features include Chemically Coupled, Heat Stabilized, UV Stabilized and Structural.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, Weatherable/UV stable, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polypropylene, Unspecified (PP, Unspecified)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

MECHANICAL (1) Tensile Stress, break 131 MPa ASTM D638 Tensile Strain, break 1.8 % ASTM D638 Tensile Modulus, 50 mm/min 10440 MPa ASTM D638 Flexural Stress 187 MPa ASTM D790 Flexural Modulus 9340 MPa ASTM D790 Tensile Stress, break 141 MPa ISO 527 Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 178 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) WPa ISO 178 Iso 1 mpact, notched, 23°C 208 J/m ASTM D256 Instrumented Dart Impact Energy @ peak, 23°C 13 J ASTM D3763	UNITS TEST METHODS	TYPICAL VALUES	PROPERTIES
Tensile Strain, break 1.8 % ASTM D638 Tensile Modulus, 50 mm/min 10440 MPa ASTM D638 Flexural Stress 187 MPa ASTM D790 Flexural Modulus 9340 MPa ASTM D790 Tensile Stress, break 141 MPa ISO 527 Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) IMPACT (1) IMPACT (2) IMPACT (3) IMPACT (3) IMPACT (4) ASTM D256			MECHANICAL (1)
Tensile Modulus, 50 mm/min 10440 MPa ASTM D638 Flexural Stress 187 MPa ASTM D790 Flexural Modulus 9340 MPa ASTM D790 Tensile Stress, break 141 MPa ISO 527 Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) IMPACT (1) ASTM D256	MPa ASTM D638	131	Tensile Stress, break
Flexural Stress 187 MPa ASTM D790 Flexural Modulus 9340 MPa ASTM D790 Tensile Stress, break 141 MPa ISO 527 Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) IMPACT (1) Izod Impact, notched, 23°C 208 J/m ASTM D256	% ASTM D638	1.8	Tensile Strain, break
Flexural Modulus 9340 MPa ASTM D790 Tensile Stress, break 141 MPa ISO 527 Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) IMPACT (1) Izod Impact, notched, 23°C 208 J/m ASTM D256	MPa ASTM D638	10440	Tensile Modulus, 50 mm/min
Tensile Stress, break 141 MPa ISO 527 Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) IMPACT (1) Izod Impact, notched, 23°C 208 J/m ASTM D256	MPa ASTM D790	187	Flexural Stress
Tensile Strain, break 1.7 % ISO 527 Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) IMPACT (2) Izod Impact, notched, 23°C 208 J/m ASTM D256	MPa ASTM D790	9340	Flexural Modulus
Tensile Modulus, 1 mm/min 13870 MPa ISO 527 Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) Lzod Impact, notched, 23°C 208 J/m ASTM D256	MPa ISO 527	141	Tensile Stress, break
Flexural Stress 214 MPa ISO 178 Flexural Modulus 11140 MPa ISO 178 IMPACT (1) Izod Impact, notched, 23°C 208 J/m ASTM D256	% ISO 527	1.7	Tensile Strain, break
Flexural Modulus 11140 MPa ISO 178 IMPACT ⁽¹⁾ Izod Impact, notched, 23°C 208 J/m ASTM D256	MPa ISO 527	13870	Tensile Modulus, 1 mm/min
IMPACT (1) Izod Impact, notched, 23°C 208 J/m ASTM D256	MPa ISO 178	214	Flexural Stress
Izod Impact, notched, 23°C 208 J/m ASTM D256	MPa ISO 178	11140	Flexural Modulus
			IMPACT (1)
Instrumented Dart Impact Energy @ peak, 23°C 13 J ASTM D3763	J/m ASTM D256	208	Izod Impact, notched, 23°C
	J ASTM D3763	13	Instrumented Dart Impact Energy @ peak, 23°C
Multiaxial Impact 13 J ISO 6603	J ISO 6603	13	Multiaxial Impact
Izod Impact, unnotched 80*10*4 +23°C 66 kJ/m² ISO 180/1U	kJ/m² ISO 180/1U	66	Izod Impact, unnotched 80*10*4 +23°C
Izod Impact, notched 80*10*4 +23°C 29 kJ/m² ISO 180/1A	kJ/m² ISO 180/1A	29	Izod Impact, notched 80*10*4 +23°C
THERMAL (1)			THERMAL (1)
HDT, 1.82 MPa, 3.2mm, unannealed 157 °C ASTM D648	°C ASTM D648	157	HDT, 1.82 MPa, 3.2mm, unannealed
CTE, -40°C to 40°C, flow 3.36E-05 1/°C ASTM E831	1/°C ASTM E831	3.36E-05	CTE, -40°C to 40°C, flow
CTE, -40°C to 40°C, xflow 4.57E-05 1/°C ASTM E831	1/°C ASTM E831	4.57E-05	CTE, -40°C to 40°C, xflow



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	3.37E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.58E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	134	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	160	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.35	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.13	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.28	%	ASTM D955
Density	1.33	g/cm³	ISO 1183
INJECTION MOLDING (3)			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	220 – 250	°C	
Front - Zone 3 Temperature	250 – 260	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	230 – 245	°C	
Mold Temperature	40 – 65	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

⁽¹⁾ The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

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⁽²⁾ Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

⁽³⁾ Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.