LNP™ VERTON™ COMPOUND MV00ASXP

MFX-700-10 HS

DESCRIPTION

LNP VERTON MV00AS is a compound based on Polypropylene (PP) resin containing 50% long glass fiber. Added features include Chemically Coupled, Heat Stabilized and Structural.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, 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	Water Management
Consumer	Sport/Leisure, Home Appliances, Commercial Appliance
Industrial	Industrial General

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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 527
Flexural Stress	214	MPa	ISO 178
Flexural Modulus	11140	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched, 23°C	208	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	13	J	ASTM D3763
Multiaxial Impact	13	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	66	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	29	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	157	°C	ASTM D648
CTE, -40°C to 40°C, flow	3.36E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	4.57E-05	1/°C	ASTM E831

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	164	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	160	°C	ISO 75/Af
Relative Temp Index, Elec [2]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	65	°C	UL 746B
PHYSICAL [1]			
Density	1.33	g/cm³	ASTM D792
Wear Factor Washer	73	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.34	-	ASTM D3702 Modified: Manual
Static COF	0.52	-	ASTM D3702 Modified: Manual
Density	1.33	g/cm³	ISO 1183
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101358095	-	-
UL Recognized, 94HB Flame Class Rating [2]	≥1.5	mm	UL 94
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.

(2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(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.

DISCLAIMER