LNP™ VERTON™ COMPOUND MV006S

MFX-7006 HS

DESCRIPTION

LNP VERTON MV006S is a compound based on Polypropylene resin containing 30% Long Glass Fiber. Added features of this material include: Chemically Coupled, Structural.

TYPICAL PROPERTY VALUES

Revision 20191113

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	110	MPa	ISO 527
Tensile Strain, break	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	7500	MPa	ISO 527
Flexural Modulus	6000	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	135	MPa	ISO 178
Flexural Stress, break, 2 mm/min	130	MPa	ISO 178
Tensile Modulus, 5 mm/min	7100	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	95	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	6100	MPa	ASTM D 790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	135	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	130	MPa	ASTM D 790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	24	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	42	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	24	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	35	kJ/m²	ISO 179/1eU
Izod Impact, notched, 23°C	195	J/m	ASTM D 256
Izod Impact, unnotched, 23°C	460	J/m	ASTM D 4812
Multiaxial Impact	14	J	ISO 6603
Instrumented Impact Energy @ peak, 23°C	8	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	140	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	157	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	164	°C	ISO 75/Bf
CTE, -40°C to 40°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.0E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	140	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	156	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.1E-05	1/°C	ASTM E 831
Relative Temp Index, Elec (1)	65	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	65	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	65	°C	UL 746B

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Density	1.12	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.008	%	ISO 62
Water Absorption, (23°C/sat)	0.07	%	ISO 62
Mold Shrinkage, flow, 24 hrs	0.21	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.28	%	ISO 294
Density	1.12	g/cm³	ASTM D 792
Water Absorption, 24 hours	0.03	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.21	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.28	%	ASTM D 955
Wear Factor Washer	44	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.36	-	ASTM D 3702 Modified: Manual
Static COF	0.39	-	ASTM D 3702 Modified: Manual
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E45329-101358095	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
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) 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.

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