LNP™ VERTON™ COMPOUND RV0079SS

RF-7007 FR

DESCRIPTION

LNP VERTON RV0079SS is a compound based on Polyamide 66 (Nylon 66) resin containing 35% long glass fiber. Added features include Flame Retardant, Heat Stabilized and Structural.

GENERAL INFORMATION	
Features	Flame Retardant, Good Processability, Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
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

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	213	MPa	ISO 527
Tensile Stress, break, 5 mm/min	213	MPa	ISO 527
Tensile Strain, break	1.8	%	ISO 527
Tensile Strain, break, 5 mm/min	1.8	%	ISO 527
Tensile Modulus, 1 mm/min	15070	MPa	ISO 527
Flexural Stress	298	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	298	MPa	ISO 178
Flexural Modulus	13280	MPa	ISO 178
Flexural Modulus, 2 mm/min	13280	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	57	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	32	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	262	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	259	°C	ISO 75/Af
Relative Temp Index, Elec [2]	130	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	105	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	115	°C	UL 746B
PHYSICAL [1]			
Density	1.69	g/cm³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL [2]			
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 0	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 1	≥1.7	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥3	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 1	≥1.7	mm	UL 746A
High Voltage Arc Track Rate {PLC}	1	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D495
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101281605	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.7	mm	UL 94
INJECTION MOLDING [3]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	290 – 305	°C	
Front - Zone 3 Temperature	290 – 300	°C	
Middle - Zone 2 Temperature	290 – 300	°C	
Rear - Zone 1 Temperature	280 – 295	°C	
Mold Temperature	95 – 110	°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