LNP™ VERTON™ COMPOUND RVL29XXP

RFL-8029

DESCRIPTION

LNP VERTON RVL29XXP is a compound based on PA 66 resin, containing Long Glass Fiber, PTFE. Added features include; Internally Lubricated.

TYPICAL PROPERTY VALUES

Revision 20190806

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	231	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Flexural Stress, yield, 2 mm/min	361	MPa	ISO 178
Flexural Strain, break, 2 mm/min	3.2	%	ISO 178
Flexural Modulus, 2 mm/min	13600	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	3.6	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	3.2	%	ISO 178
Flexural Strain, break, 2 mm/min, 150°C	3.5	%	ISO 178
Flexural Strain, break, 2 mm/min, 200°C	2.7	%	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	300	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	256	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 150°C	204	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 200°C	162	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	11700	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	10500	MPa	ISO 178
Flexural Modulus, 2 mm/min, 150°C	9000	MPa	ISO 178
Flexural Modulus, 2 mm/min, 200°C	8900	MPa	ISO 178
IMPACT			
Izod Impact, notched 80*10*3 -40°C	28	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	82	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -40°C	74	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	30	kJ/m²	ISO 180/1A
THERMAL			
Specific Heat	1478	J/kg-K	ASTM E 1269
CTE, 23°C to 60°C, flow	2.1E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	4.9E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Af
Thermal Conductivity	0.27	W/m-K	ASTM D 5930
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
PHYSICAL			
Mold Shrinkage, flow, 24 hrs	0.13	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.48	%	ISO 294

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Wear Factor Washer	21	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.39	-	ASTM D 3702 Modified: Manual
Static COF	0.4	-	ASTM D 3702 Modified: Manual
Density	1.65	g/cm³	ISO 1183
Water Absorption, 23°C/24hrs	1.19	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.46	%	ISO 62
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E45329-101282694	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
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) 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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