NORYL™ RESIN SE100X

REGION AMERICAS

DESCRIPTION

PPE+PS blend. Unfilled. Non-brominated, non-chlorinated FR system. UL94 V0/V1 rated. RTI Elec/Imp/Str 95/80/95. Good flow. Suitable for E/E market indoor/outdoor applications.

TYPICAL PROPERTY VALUES

Revision 20170531

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	46	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	25	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	82	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2300	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	256	J/m	ASTM D 256
Izod Impact, notched, -30°C	90	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	40	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	16	J	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	102	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	92	°C	ASTM D 648
Relative Temp Index, Elec	95	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	95	°C	UL 746B
PHYSICAL			
Specific Gravity	1.1	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.5 – 0.7	%	SABIC method
Mold Shrinkage on Tensile Bar, xflow (2) (5)	0.5 – 0.7	%	SABIC method
ELECTRICAL			
Volume Resistivity	3.1E+16	Ohm-cm	ASTM D 257
Surface Resistivity	> 1.E+15	Ohm	ASTM D 257
Dielectric Strength, in oil, 3.2 mm	17.9	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	2.66	-	ASTM D 150
Relative Permittivity, 1 MHz	2.57	-	ASTM D 150

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dissipation Factor, 50/60 Hz	0.006	-	ASTM D 150
Dissipation Factor, 1 MHz	0.0026	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D 495
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	1	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1.47	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	5.99	mm	UL 94
Oxygen Index (LOI)	32.5	%	ASTM D 2863
Radiant Panel Listing	☑	-	UL Tested
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING			
Drying Temperature	75 – 80	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 – 275	°C	
Nozzle Temperature	250 – 275	°C	
Front - Zone 3 Temperature	240 – 275	°C	
Middle - Zone 2 Temperature	225 – 270	°C	
Rear - Zone 1 Temperature	215 – 265	°C	
Mold Temperature	55 – 75	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 70	%	
Vent Depth	0.038 – 0.051	mm	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.
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