

# NORYL GTX™ RESIN GTX909

REGION ASIA

## DESCRIPTION

400F (205C) HDT. 3.3 Notched Izod. Excellent chemical resistance

## TYPICAL PROPERTY VALUES

Revision 20180905

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	66	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	59	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	9	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	50	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	99	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2370	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	176	J/m	ASTM D 256
Izod Impact, notched, -30°C	106	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	40	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	24	J	ASTM D 3763
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	245	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	204	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	125	°C	ASTM D 648
CTE, -20°C to 150°C, flow	9.54E-05	1/°C	ASTM E 831
CTE, -20°C to 150°C, xflow	8.1E-05	1/°C	ASTM E 831
<b>PHYSICAL</b>			
Specific Gravity	1.13	-	ASTM D 792
Water Absorption, 24 hours	0.54	%	ASTM D 570
Water Absorption, equilibrium, 23C	4.4	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	1.3 – 1.7	%	SABIC method
<b>ELECTRICAL</b>			
Volume Resistivity	4.4E+16	Ohm-cm	ASTM D 257
Surface Resistivity	1.7E+16	Ohm	ASTM D 257
Dielectric Strength, in oil, 3.2 mm	25.5	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	3.27	-	ASTM D 150
Relative Permittivity, 1 MHz	2.76	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.039	-	ASTM D 150
Dissipation Factor, 1 MHz	0.019	-	ASTM D 150
<b>INJECTION MOLDING</b>			
Drying Temperature	95 – 105	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.07	%	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Minimum Moisture Content	0.02	%	
Melt Temperature	270 – 295	°C	
Nozzle Temperature	270 – 295	°C	
Front - Zone 3 Temperature	265 – 295	°C	
Middle - Zone 2 Temperature	260 – 295	°C	
Rear - Zone 1 Temperature	255 – 295	°C	
Mold Temperature	65 – 95	°C	
Back Pressure	0.3 – 1.4	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 50	%	
Vent Depth	0.013 – 0.038	mm	

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