

NORYL GTX™ RESIN GTX902

REGION ASIA

DESCRIPTION

Unreinforced. Excellent chemical resistance and paintability. 312F (155C) HDT.

TYPICAL PROPERTY VALUES

Revision 20180906

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	59	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	56	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	9	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	52	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	89	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2240	MPa	ASTM D 790
Hardness, Rockwell R	118	-	ASTM D 785
Taber Abrasion, CS-17, 1 kg	19	mg/1000cy	ASTM D 1044
IMPACT			
Izod Impact, unnotched, 23°C	3204	J/m	ASTM D 4812
Izod Impact, unnotched, -30°C	3204	J/m	ASTM D 4812
Izod Impact, unnotched, -40°C	3204	J/m	ASTM D 4812
Izod Impact, notched, 23°C	272	J/m	ASTM D 256
Izod Impact, notched, -30°C	117	J/m	ASTM D 256
Izod Impact, notched, -40°C	53	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	46	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	36	J	ASTM D 3763
Instrumented Impact Energy @ peak, -40°C	19	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	232	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	155	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	127	°C	ASTM D 648
CTE, -20°C to 150°C, flow	9.E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL			
Specific Gravity	1.08	-	ASTM D 792
Water Absorption, 24 hours	0.4	%	ASTM D 570
Water Absorption, equilibrium, 23C	3.6	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.9 – 1.2	%	SABIC method
Mold Shrink, flow, annealed 130C 1hr	1.1 – 1.5	%	ASTM D 955
Mold Shrinkage, xflow, 3.2 mm	0.8 – 1.1	%	SABIC method
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating	1.49	mm	UL 94

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INJECTION MOLDING			
Drying Temperature	95 – 105	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.07	%	
Minimum Moisture Content	0.02	%	
Melt Temperature	275 – 300	°C	
Nozzle Temperature	275 – 300	°C	
Front - Zone 3 Temperature	270 – 300	°C	
Middle - Zone 2 Temperature	265 – 300	°C	
Rear - Zone 1 Temperature	260 – 300	°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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