

NORYL GTX™ RESIN GTX830

REGION EUROPE

DESCRIPTION

30% Glass Reinforced PPE+PA Alloy.

TYPICAL PROPERTY VALUES

Revision 20180309

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	110	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	7300	MPa	ISO 527
Flexural Stress, break, 2 mm/min	170	MPa	ISO 178
Flexural Modulus, 2 mm/min	6200	MPa	ISO 178
Hardness, H358/30	110	MPa	ISO 2039-1
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	45	kJ/m ²	ISO 180/1U
Charpy Impact, notched, 23°C	7	kJ/m ²	ISO 179/2C
Charpy Impact, notched, -20°C	7	kJ/m ²	ISO 179/2C
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	60	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	40	kJ/m ²	ISO 179/1eU
THERMAL			
Thermal Conductivity	0.26	W/m-°C	ISO 8302
CTE, 23°C to 60°C, flow	2.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	220	°C	ISO 306
Vicat Softening Temp, Rate B/120	220	°C	ISO 306
Relative Temp Index, Elec	120	°C	UL 746B
Relative Temp Index, Mech w/impact	90	°C	UL 746B
Relative Temp Index, Mech w/o impact	125	°C	UL 746B
PHYSICAL			
Mold Shrinkage, flow, 3.2 mm (5)	0.2 – 0.3	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm (5)	0.8 – 1	%	SABIC method
Density	1.32	g/cm ³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Water Absorption, (23°C/sat)	3.1	%	ISO 62
Moisture Absorption (23°C / 50% RH)	1.09	%	ISO 62
Melt Volume Rate, MVR at 280°C/5.0 kg	7	cm ³ /10 min	ISO 1133
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94HB Flame Class Rating 2nd value (3)	3	mm	UL 94
Oxygen Index (LOI)	29	%	ISO 4589
INJECTION MOLDING			
Drying Temperature	100 – 110	°C	
Drying Time	2 – 3	hrs	
Maximum Moisture Content	0.07	%	
Melt Temperature	280 – 300	°C	
Nozzle Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	80 – 100	°C	

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