

NORYL GTX™ RESIN GTX8120P

REGION AMERICAS

DESCRIPTION

NORYL GTX8120P resin is a 20% glass fiber reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This extrudable grade has excellent chemical resistance and high heat resistance. . NORYL GTX8120P resin is anodizable, has low thermal conductivity and is an excellent candidate for extruded thermal break applications.

GENERAL INFORMATION

Features	Chemical Resistance, Hydrolytic Stability, Low Warpage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, High stiffness/Strength, High temperature resistance
Fillers	Glass Fiber
Polymer Types	Polyphenylene Ether + PA (PPE+Nylon)
Processing Techniques	Extrusion

INDUSTRY

Building and Construction

SUB INDUSTRY

Building Component

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield, 5 mm/min	125	MPa	ISO 527
Tensile Stress, break, 5 mm/min	125	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Strain, break, 5 mm/min	3.5	%	ISO 527
Tensile Modulus, 1 mm/min	6800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	175	MPa	ISO 178
Flexural Modulus, 2 mm/min	5000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	6	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m ²	ISO 179/1eA
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	3.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.5E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	235	°C	ISO 306
Vicat Softening Temp, Rate B/120	235	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	240	°C	ISO 75/Bf
PHYSICAL ⁽¹⁾			
Density	1.24	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	2.5	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	1	%	ISO 62
Melt Volume Rate, MVR at 280°C/10.0 kg	12	cm ³ /10 min	ISO 1133

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CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PROFILE EXTRUSION			
Drying Temperature	110 – 120	°C	
Drying Time	2 – 4	Hrs	
Melt Temperature	270 – 280	°C	
Calibrator Temperature	20 – 100	°C	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

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