

**NORYL GTX™ Resin GTX870 - Asia**

(PPE+PA\*)-GF20

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

NORYL GTX870 resin is a 20% glass reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits high stiffness, excellent chemical resistance, and high heat resistance. NORYL GTX870 resin is an excellent candidate for a wide variety of applications including electrical connectors and electronic base stations.

| <b>Mechanical properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|------------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>             |              |             |                      |
| Tensile Strength at Yield    | <b>122</b>   | MPa         | ASTM D 638           |
| Elongation at Break          | <b>5</b>     | %           | ASTM D 638           |
| Flexural Modulus             | <b>5680</b>  | MPa         | ASTM D 790           |
| Flexural Strength            | <b>166</b>   | MPa         | ASTM D 790           |
| Izod Impact notched, 1/8 in  | <b>117</b>   | J/m         | ASTM D 256           |

| <b>Thermal properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>          |              |             |                      |
| DTUL @ 264 psi            | <b>200</b>   | °C          | ASTM D 648           |

| <b>Other properties</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|-------------------------|--------------|-------------------|----------------------|
| Water Absorption, 24hr  | <b>0.5</b>   | %                 | ASTM D 570           |
| Density                 | <b>1240</b>  | kg/m <sup>3</sup> | ASTM D 792           |

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>     | <b>Unit</b> | <b>Test Standard</b> |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature                           | <b>95 - 105</b>  | °C          | -                    |
| Pre-drying - Time                                  | <b>3 - 4</b>     | h           | -                    |
| Processing humidity                                | <b>≤0.07</b>     | %           | -                    |
| Melt temperature                                   | <b>280 - 305</b> | °C          | -                    |
| Mold temperature                                   | <b>75 - 120</b>  | °C          | -                    |
| Zone 1   | <b>265 - 305</b> | °C          | -                    |
| Zone 2   | <b>270 - 305</b> | °C          | -                    |
| Zone 3   | <b>275 - 305</b> | °C          | -                    |
| Nozzle temperature                                 | <b>280 - 305</b> | °C          | -                    |
| Screw speed  | <b>20 - 100</b>  | rpm         | -                    |
| Back pressure                                      | <b>0.3 - 1.4</b> | MPa         | -                    |

**Characteristics****Processing**

Injection Molding

**Applications**

Electrical and Electronical

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

Asia Pacific

**Chemical Resistance**

General Chemical Resistance