

**Product Texts**

NORYL GTX™ 679 resin is a conductive, mineral reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade is optimized to allow for primer-less electrostatic painting. NORYL GTX679 resin has improved impact / elongation, and the mineral content allows for the material to be used in structural applications such as metal and thermoset resin replacement. This material is available only in black.

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	<b>14</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>220</b>	°C	-
Load	<b>5</b>	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	<b>16</b>	g/10min	ASTM D 1238
Temperature	<b>280</b>	°C	-
Load	<b>5</b>	kg	-

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	<b>4790</b>	MPa	ISO 527
Yield stress	<b>61</b>	MPa	ISO 527
Yield strain	<b>2</b>	%	ISO 527
Stress at break	<b>61</b>	MPa	ISO 527
Strain at break	<b>5</b>	%	ISO 527
Flexural modulus	<b>4440</b>	MPa	ISO 178
Charpy notched impact strength, +23°C	<b>3</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	<b>4</b>	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	<b>3</b>	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	<b>4450</b>	MPa	ASTM D 638
Tensile Strength at Yield	<b>64</b>	MPa	ASTM D 638
Tensile Strength at Break	<b>62</b>	MPa	ASTM D 638
Elongation at Yield	<b>3</b>	%	ASTM D 638
Elongation at Break	<b>4</b>	%	ASTM D 638
Flexural Modulus	<b>4000</b>	MPa	ASTM D 790
Izod Impact notched, 1/8 in	<b>39</b>	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	<b>31</b>	J/m	ASTM D 256
Temperature	<b>-30</b>	°C	-

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Temp. of deflection under load, 0.45 MPa	<b>184</b>	°C	ISO 75-1/-2
Vicat softening temperature, B	<b>185</b>	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	<b>188</b>	°C	ISO 306
<b>ASTM Data</b>			
DTUL @ 66 psi	<b>185</b>	°C	ASTM D 648
Vicat Temperature	<b>185</b>	°C	ASTM D 1525

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Water absorption	<b>3.6</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.7</b>	%	Sim. to ISO 62
Density	<b>1240</b>	kg/m <sup>3</sup>	ISO 1183
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>275 - 300</b>	°C	-
Mold temperature	<b>65 - 95</b>	°C	-

**NORYL GTX™ Resin GTX679 - Asia**

(PPE+PA\*)-MF

Saudi Basic Industries Corporation (SABIC)

Zone 1	<b>260 - 300</b>	°C	-
Zone 2	<b>265 - 300</b>	°C	-
Zone 3	<b>270 - 300</b>	°C	-
Screw speed	<b>20 - 100</b>	rpm	-
Back pressure	<b>0.3 - 1.4</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Regional Availability**

Asia Pacific

**Applications**

Automotive