

**Product Texts**

NORYL PX500 is an unfilled modified polyphenylene ether resin capable of multiple conversion routes. This resin is designed for lower odor during conversion than many standard modified PPE resins. NORYL PX500 provides an exceptional balance of high heat performance and dimensional stability with flow and may be an excellent material candidate for IC tray applications.

<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>21</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>320</b>	°C	-
Load	<b>5</b>	kg	-
<b>ASTM Data</b>			
Mold Shrinkage, MD	<b>0.0085</b>	mm/mm	ASTM D 955
Mold Shrinkage, TD	<b>0.0085</b>	mm/mm	ASTM D 955

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	<b>2500</b>	MPa	ISO 527
Yield stress	<b>70</b>	MPa	ISO 527
Yield strain	<b>5.1</b>	%	ISO 527
Strain at break	<b>5.1</b>	%	ISO 527
Flexural modulus, 23°C	<b>2530</b>	MPa	ISO 178
Charpy notched impact strength, +23°C	<b>9</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	<b>8</b>	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	<b>2400</b>	MPa	ASTM D 638
Tensile Strength at Yield	<b>71</b>	MPa	ASTM D 638
Tensile Strength at Break	<b>56</b>	MPa	ASTM D 638
Elongation at Yield	<b>5.4</b>	%	ASTM D 638
Elongation at Break	<b>35</b>	%	ASTM D 638
Flexural Modulus	<b>2590</b>	MPa	ASTM D 790
Shore D Hardness	<b>82</b>	-	ASTM D 2240
Izod Impact notched, 1/8 in	<b>80</b>	J/m	ASTM D 256

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	<b>169</b>	°C	ISO 75-1/-2
Vicat softening temperature, B	<b>192</b>	°C	ISO 306
Coeff. of linear therm. expansion, parallel	<b>71</b>	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	<b>79</b>	E-6/K	ISO 11359-1/-2
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	<b>71</b>	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	<b>79</b>	E-6/K	ASTM D 696
DTUL @ 264 psi	<b>170</b>	°C	ASTM D 648
Vicat Temperature	<b>192</b>	°C	ASTM D 1525

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Water absorption	<b>0.23</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.06</b>	%	Sim. to ISO 62
Density	<b>1060</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1060</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>110 - 120</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Processing humidity	<b>≤0.02</b>	%	-
Melt temperature	<b>300 - 325</b>	°C	-
Mold temperature	<b>80 - 110</b>	°C	-
Zone 1	<b>265 - 315</b>	°C	-
Zone 2	<b>275 - 320</b>	°C	-

**NORYL™ Resin PX500 Asia**

PPE

Saudi Basic Industries Corporation (SABIC)

Zone 3	<b>290 - 325</b>	°C	-
Nozzle temperature	<b>300 - 325</b>	°C	-
Screw speed	<b>20 - 100</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Additives**

Release agent

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**Features**

Low Odor, Low Warpage

**Applications**

Building Construction, Electrical and Electronical

**Regional Availability**

Asia Pacific