

**Product Texts**

NORYL GTX™ 964 resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits high heat resistance, excellent chemical resistance and high melt flow for optimized processability. NORYL GTX964 resin is impact modified and designed for automotive exterior thin wall, large parts such as body panels.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	7	cm <sup>3</sup> /10min	ISO 1133
Temperature	280	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2000	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	45	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	1800	MPa	ISO 178
Charpy notched impact strength, +23°C	45	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	20	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	50	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	20	kJ/m <sup>2</sup>	ISO 180/1A
Ball indentation hardness	80	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Vicat softening temperature, A	240	°C	ISO 306
Vicat softening temperature, B	175	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	180	°C	ISO 306
Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
Thermal Conductivity	0.23	W/(m K)	DIN 52616

Other properties	Value	Unit	Test Standard
Water absorption	3.5	%	Sim. to ISO 62
Humidity absorption	1.19	%	Sim. to ISO 62
Density	1080	kg/m <sup>3</sup>	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	2 - 3	h	-
Processing humidity	≤0.07	%	-
Melt temperature	290 - 320	°C	-
Mold temperature	80 - 120	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	260 - 280	°C	-
Zone 2	280 - 300	°C	-
Zone 3	290 - 320	°C	-

**Characteristics**

**Processing**

Injection Molding

**Applications**

Automotive

**Special Characteristics**

High impact or impact modified

**Regional Availability**

Europe