

## Noryl GTX\* Resin EXNX0080

Americas: COMMERCIAL

Noryl APS\* EXNX0080 resin is a glass filled, high performance blend of PPE/PPS that exhibits an excellent balance of high-heat resistance, strength, flame retardant, and conductivity. This grade can be electro-statically painted or powder coated without the need for a conductive primer. The resin is injection moldable and only available in black.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, brk, Type I, 5 mm/min	79	MPa	ASTM D 638
Nominal Stress, yld, Type I, 5 mm/min	79	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	0.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	0.6	%	ASTM D 638
Tensile Modulus, 5 mm/min	16300	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	118	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	12740	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	89	MPa	ISO 527
Tensile Stress, break, 5 mm/min	89	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	0.6	%	ISO 527
Tensile Strain, break, 5 mm/min	0.6	%	ISO 527
Tensile Modulus, 1 mm/min	14990	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	0	MPa	ISO 178
Flexural Modulus, 2 mm/min	13640	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, notched, 23°C	34	J/m	ASTM D 256
Izod Impact, notched, -30°C	37	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	3	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	34	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	34	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	34	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	231	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	234	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.7E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.9E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	233	°C	ISO 306
Vicat Softening Temp, Rate B/120	231	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	229	°C	ISO 75/Ae
<b>PHYSICAL</b>			
Specific Gravity	1.62	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.3 - 0.8	%	SABIC Method
Melt Flow Rate, 300°C/2.16 kgf	16	g/10 min	ASTM D 1238
Density	1.62	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/sat)	0.02	%	ISO 62

Moisture Absorption (23°C / 50% RH)	0	%	ISO 62
Melt Volume Rate, MVR at 300°C/2.16 kg	10	cm <sup>3</sup> /10 min	ISO 1133
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	2.5E+04	Ohm-cm	ASTM D 257

Source GMD, last updated:01/05/2007

## Processing

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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