

NORYL™ RESIN PX1390

REGION AMERICAS

DESCRIPTION

NORYL™ PX1390 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade inherently meets UL94 HB flame rating. NORYL PX1390 resin exhibits excellent electrical properties, easy processability, high heat resistance, and good dimensional stability. It is an excellent candidate for automotive connector applications.

TYPICAL PROPERTY VALUES

Revision 20190226

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	30	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	99	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2270	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	288	J/m	ASTM D 256
Izod Impact, notched, -40°C	160	J/m	ASTM D 256
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	154	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	146	°C	ASTM D 648
CTE, 0°C to 100°C, flow	7.2E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.06	-	ASTM D 792
Water Absorption, 24 hours	0.1	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
FLAME CHARACTERISTICS ⁽¹⁾			
UL Yellow Card Link	E121562-221188	-	-
UL Recognized, 94HB Flame Class Rating	≥0.7	mm	UL 94
INJECTION MOLDING			
Drying Temperature	105 – 110	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 – 315	°C	
Nozzle Temperature	295 – 315	°C	
Front - Zone 3 Temperature	280 – 315	°C	
Middle - Zone 2 Temperature	270 – 310	°C	
Rear - Zone 1 Temperature	260 – 305	°C	
Mold Temperature	75 – 105	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 70	%	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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