

NORYL PPX™ RESIN PPX7110

REGION ASIA

DESCRIPTION

NORYL PPX7110 resin is a non-reinforced alloy of polyphenylene ether (PPE) + Polypropylene (PP). This injection moldable grade exhibits high impact resistance and good heat resistance along with hydrolytic and dimensional stability. NORYL PPX7110 resin is an excellent candidate for applications requiring high impact, chemical resistance, and good heat performance.

GENERAL INFORMATION

Features

Chemical Resistance, Hydrolytic Stability, Low Warpage, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, High stiffness/Strength, High temperature resistance, Impact resistant, No PFAS intentionally added

Fillers

Unreinforced

Polymer Types

Polyphenylene Ether + PP (PPE+PP)

Processing Techniques

Sheet extrusion, Injection Molding

INDUSTRY

Building and Construction

Consumer

Hygiene and Healthcare

SUB INDUSTRY

Water Management

Home Appliances, Commercial Appliance

Patient Testing

TYPICAL PROPERTY VALUES

Revision 20230607

PROPERTIES**TYPICAL VALUES****UNITS****TEST METHODS****MECHANICAL ⁽¹⁾**

Tensile Stress, yld, Type I, 50 mm/min

35

MPa

ASTM D638

Tensile Stress, brk, Type I, 50 mm/min

32

MPa

ASTM D638

Tensile Strain, yld, Type I, 50 mm/min

6.5

%

ASTM D638

Tensile Strain, brk, Type I, 50 mm/min

195

%

ASTM D638

Tensile Modulus, 50 mm/min

1340

MPa

ASTM D638

Flexural Stress, yld, 1.3 mm/min, 50 mm span

51

MPa

ASTM D790

Flexural Modulus, 1.3 mm/min, 50 mm span

1550

MPa

ASTM D790

IMPACT ⁽¹⁾

Izod Impact, notched, 23°C

437

J/m

ASTM D256

Izod Impact, notched, -30°C

149

J/m

ASTM D256

Instrumented Dart Impact Total Energy, 23°C

37

J

ASTM D3763

Instrumented Dart Impact Total Energy, -30°C

27

J

ASTM D3763

THERMAL ⁽¹⁾

Vicat Softening Temp, Rate B/50

138

°C

ASTM D1525

HDT, 0.45 MPa, 3.2 mm, unannealed

113

°C

ASTM D648

HDT, 1.82 MPa, 3.2mm, unannealed

77

°C

ASTM D648

CTE, -40°C to 40°C, flow

8.1E-05

1/°C

ASTM E831

CTE, -40°C to 40°C, xflow

1.12E-04

1/°C

ASTM E831

PHYSICAL ⁽¹⁾

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Specific Gravity	0.97	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.8 – 1.2	%	SABIC method
Melt Flow Rate, 260°C/5.0 kgf	10.6	g/10 min	ASTM D1238
INJECTION MOLDING ⁽³⁾			
Drying Temperature	60 – 65	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	260 – 290	°C	
Front - Zone 3 Temperature	250 – 290	°C	
Middle - Zone 2 Temperature	240 – 280	°C	
Rear - Zone 1 Temperature	225 – 275	°C	
Mold Temperature	30 – 50	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 70	%	
Vent Depth	0.038 – 0.051	mm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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