NORYL™ RESIN PX0844

REGION ASIA

DESCRIPTION

NORYL PX0844 resin is a non-reinforced blend of polyphenylene ether (PPE) + polystyrene (PS). This grade exhibits very low moisture absorption, hydrolytic stability, dimensional stabilty, good foam adhesion, and property retention over a wide temperature range. NORYL PX0844 resin is inherently UL94 HB and is an excellent candidate for automotive interior applications such as instrument panels, audio components, speaker housings, and interior trim. *see NORYL PX0888 resin for higher heat resistance.

GENERAL INFORMATION	
Features	Hydrolytic Stability, Low Warpage, Amorphous, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors

TYPICAL PROPERTY VALUES

Revision 20240820

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 50 mm/min	49	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	30	%	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	75	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	2240	MPa	ASTM D790
Hardness, Rockwell R	114	-	ASTM D785
IMPACT [1]			
Izod Impact, notched, 23°C	270	J/m	ASTM D256
Izod Impact, notched, -40°C	133	J/m	ASTM D256
THERMAL [1]			
HDT, 0.45 MPa, 6.4 mm, unannealed	121	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	112	°C	ASTM D648
CTE, 0°C to 100°C, flow	7.38E-05	1/°C	ASTM E831
PHYSICAL [1]			
Specific Gravity	1.06	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm [2]	0.5 – 0.7	%	SABIC method
INJECTION MOLDING [3]			
Drying Temperature	105 – 110	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	275 – 305	°C	
Nozzle Temperature	275 – 305	°C	
Front - Zone 3 Temperature	265 – 305	°C	
Middle - Zone 2 Temperature	255 – 300	°C	
Rear - Zone 1 Temperature	245 – 295	°C	
Mold Temperature	70 – 100	°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.

DISCLAIMER