

# NORYL™ RESIN EM7304F

REGION ASIA

## DESCRIPTION

NORYL EM7304F resin is a 15% glass fiber reinforced blend of polyphenylene ether (PPE) + polystyrene (PS). This injection moldable grade has enhanced polyurethane foam adhesion and high flow along with creep resistance, dimensional stability, and hydrolytic stability. NORYL EM7304F resin is an excellent candidate for automotive interior applications such as instrument panel retainers.

GENERAL INFORMATION	
Features	Flame Retardant, High Flow, Hydrolytic Stability, Low Warpage, Amorphous, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Food contact, Dimensional stability, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, brk, Type I, 5 mm/min	77	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	108	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	4550	MPa	ASTM D790
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	64	J/m	ASTM D256
<b>THERMAL <sup>(1)</sup></b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	123	°C	ASTM D648
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.15	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm <sup>(2)</sup>	0.2 – 0.3	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm <sup>(2)</sup>	0.25 – 0.45	%	SABIC method
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	100 – 105	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	270 – 300	°C	
Nozzle Temperature	270 – 300	°C	
Front - Zone 3 Temperature	260 – 300	°C	
Middle - Zone 2 Temperature	250 – 295	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Rear - Zone 1 Temperature	240 – 290	°C	
Mold Temperature	65 – 95	°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.

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.