

Revision 20241025

# NORYL<sup>™</sup> RESIN NCF1010

#### DESCRIPTION

NORYL™ NCF1010 is a compound based on PPE+PS resin containing 10% Glass Fiber, 10% Carbon Fiber and 10% PTFE. Added features: Structural and Wear Resistant.

### TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL <sup>(1)</sup>			
Tensile Stress, yield	97	MPa	SABIC - Japan Method
Tensile Strain, break	7 – 7	%	SABIC - Japan Method
Flexural Stress	129	MPa	ASTM D790
Flexural Modulus	7610	MPa	ASTM D790
IMPACT <sup>(1)</sup>			
Izod Impact, notched, 23°C	58	J/m	ASTM D256
THERMAL <sup>(1)</sup>			
HDT, 0.45 MPa, 3.2 mm, unannealed	134	°C	ASTM D648
CTE, -30°C to 30°C	2.5E-05 – 4.5E-05	1/°C	ТМА
PHYSICAL <sup>(1)</sup>			
Specific Gravity	1.21	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.06	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.3 – 0.6	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.5 – 0.8	%	ASTM D955
FLAME CHARACTERISTICS <sup>(3)</sup>			
UL Yellow Card Link	<u>E45587-237058</u>	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING (4)			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Melt Temperature	300 - 305	°C	
Front - Zone 3 Temperature	300 - 310	°C	
Middle - Zone 2 Temperature	290 – 300	°C	
Rear - Zone 1 Temperature	275 – 290	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 - 60	rpm	

(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) 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.

(4) 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.

## CHEMISTRY THAT MATTERS



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