

# NORYL™ RESIN 141E

## DESCRIPTION

NORYL 141E compound is based on Polyphenylene Ether (PPE) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yield	59	MPa	SABIC - Japan Method
Tensile Strain, break	7	%	SABIC - Japan Method
Flexural Stress	88	MPa	ASTM D790
Flexural Modulus	2650	MPa	ASTM D790
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	59	J/m	ASTM D256
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	130	°C	ASTM D648
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.09	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm <sup>(2)</sup>	0.9 – 1	%	SABIC method
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity <sup>(3)</sup>	1.E+04	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	100	°C	
Drying Time	3 – 5	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	270 – 310	°C	
Nozzle Temperature	265 – 305	°C	
Front - Zone 3 Temperature	270 – 310	°C	
Middle - Zone 2 Temperature	260 – 300	°C	
Rear - Zone 1 Temperature	250 – 290	°C	
Mold Temperature	70 – 110	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Back pressure (Plastic Pressure)	5 – 10	MPa	
Screw speed (Circumferential speed)	0.1 – 0.2	m/s	
Shot to Cylinder Size	30 – 70	%	

- (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) Measurement meets requirements as specified in ASTM D4496.
- (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.

## 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.

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