



# Noryl\* Resin SE100X Americas: COMMERCIAL

PPE+PS blend. Unfilled. Non-brominated, non-chlorinated FR system. UL94 V0/V1 rated. RTI Elec/Imp/Str 95/80/95. Good flow. Suitable for E/E market indoor/outdoor applications.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	590	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	470	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	25	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	840	kgf/cm²	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	23500	kgf/cm²	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	26	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	9	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	414	cm-kgf	ASTM D 3763
Instrumented Impact Energy @ peak, -30	165	cm-kgf	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	102	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	92	°C	ASTM D 648
Relative Temp Index, Elec	95	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	95	°C	UL 746B
PHYSICAL			
Specific Gravity	1.1	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Mold Shrinkage on Tensile Bar, xflow (2)	0.5 - 0.7	%	SABIC Method
ELECTRICAL			
Volume Resistivity	3.1E+16	Ohm-cm	ASTM D 257
Surface Resistivity	>1.E+15	Ohm	ASTM D 257
Dielectric Strength, in oil, 3.2 mm	17.9	kV/mm	ASTM D 149

#### Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BY, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT http://www.sabic-ip.com.AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OFFINED HEREIN WILL BE OFFINED HEREIN WILL BY OFFINED HEREIN SELLER STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the sufficient of users and analysis. Nothing in any document or oral statement shall be deemed to after or wave any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed Seller. No statement Seller concerning a possible use of any product, services or design is intended, or should be construed, to grant any license under any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

<sup>(1)</sup> Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°0/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

<sup>(2)</sup> Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) 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.

<sup>\*</sup> Noryl is a trademark of SABIC Innovative Plastics IP BV

<sup>© 1997-2011</sup> SABIC Innovative Plastics Holding BV.All rights reserved





## Noryl\* Resin SE100X

Americas: COMMERCIAL

YPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
ELECTRICAL			
Relative Permittivity, 50/60 Hz	2.66	-	ASTM D 150
Relative Permittivity, 1 MHz	2.57	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.006	-	ASTM D 150
Dissipation Factor, 1 MHz	0.0026	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D 495
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	1	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1.47	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	5.99	mm	UL 94
Oxygen Index (LOI)	32.5	%	ASTM D 2863
Radiant Panel Listing	YES	-	UL Tested
UV-light, water exposure/immersion	F1	=	UL 746C

#### Source GMD, last updated:

#### PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BY, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT http://www.sabic-ip.com.AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR MIPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed Seller. No statement 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. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

<sup>(1)</sup> Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

<sup>(2)</sup> Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) 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.

<sup>\*</sup> NorvI is a trademark of SABIC Innovative Plastics IP BV





### Noryl\* Resin SE100X

### Americas: COMMERCIAL

ROCESSING PARAMETERS	TYPICAL VALUE	Unit	
Injection Molding			
Drying Temperature	75 - 80	°C	
Drying Time	3 - 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 - 275	°C	
Nozzle Temperature	250 - 275	°C	
Front - Zone 3 Temperature	240 - 275	°C	
Middle - Zone 2 Temperature	225 - 270	°C	
Rear - Zone 1 Temperature	215 - 265	°C	
Mold Temperature	55 - 75	°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	

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BY, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT http://www.sabic-ip.com.AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR SIMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER PND-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suer's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed Seller. No statement 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.

SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

<sup>(1)</sup> Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 238#176;C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

<sup>(2)</sup> Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) 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.

<sup>\*</sup> NorvI is a trademark of SABIC Innovative Plastics IP BV