

## SABIC Innovative Plastics Noryl HS1000X PPE+PS

Category : Polymer , Thermoplastic , Polyphenylene Ether/PPO , Polystyrene (PS)

### Material Notes:

PPE+PS blend. 13% Mineral reinforced. Non-brominated, non-chlorinated FR system. UL94 V0 and 5VA listing. UL 746C f1. Radiant Panel listing. Dielectric strength. Dimensional stability. Suitable for E/E applications. This data was supplied by SABIC-IP for the Americas region.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-Noryl-HS1000X-PPEPS.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Noryl-HS1000X-PPEPS.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.23 g/cc	1.23 g/cc	ASTM D 792
Water Absorption	0.070 % @Time 86400 sec	0.070 % @Time 24.0 hour	ASTM D 570
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC Method

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	121	121	ASTM D 785
Tensile Strength at Break	51.0 MPa	7400 psi	Type I, 5 mm/min; ASTM D 638
Tensile Strength, Yield	65.0 MPa	9430 psi	Type I, 5 mm/min; ASTM D 638
Elongation at Break	30 %	30 %	Type I, 5 mm/min; ASTM D 638
Elongation at Yield	7.6 %	7.6 %	Type I, 5 mm/min; ASTM D 638
Flexural Yield Strength	103 MPa	14900 psi	2.6 mm/min, 100 mm span; ASTM D 790
Flexural Modulus	2.89 GPa	419 ksi	2.6 mm/min, 100 mm span; ASTM D 790
Izod Impact, Notched	1.33 J/cm @Temperature 23.0 Â°C	2.49 ft-lb/in @Temperature 73.4 Â°F	ASTM D 256
Izod Impact, Unnotched	15.11 J/cm @Temperature 23.0 Â°C	28.31 ft-lb/in @Temperature 73.4 Â°F	ASTM D 4812
Impact Test	24.0 J @Temperature 23.0 Â°C	17.7 ft-lb @Temperature 73.4 Â°F	Instrumented Impact Energy @ peak; ASTM D 3763

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	98.0 Å°C @Thickness 6.40 mm	208 Å°F @Thickness 0.252 in	unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	93.0 Å°C @Thickness 6.40 mm	199 Å°F @Thickness 0.252 in	unannealed; ASTM D 648
Vicat Softening Point	125 Å°C	257 Å°F	Rate B/50; ASTM D 1525
UL RTI, Electrical	100 Å°C	212 Å°F	UL 746B
UL RTI, Mechanical with Impact	85.0 Å°C	185 Å°F	UL 746B
UL RTI, Mechanical without Impact	100 Å°C	212 Å°F	UL 746B
Flammability, UL94	V-0 @Thickness 1.01 mm	V-0 @Thickness 0.0398 in	UL 94
	5VA @Thickness 2.48 mm	5VA @Thickness 0.0976 in	UL 94

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.60e+16 ohm-cm	1.60e+16 ohm-cm	ASTM D 257
Surface Resistance	>= 1.00e+16 ohm	>= 1.00e+16 ohm	ASTM D 257
Dielectric Constant	2.83 @Frequency 1.00e+6 Hz	2.83 @Frequency 1.00e+6 Hz	ASTM D 150
	3.03 @Frequency 50.0 - 60.0 Hz	3.03 @Frequency 50.0 - 60.0 Hz	ASTM D 150
Dielectric Strength	17.7 kV/mm @Thickness 3.20 mm	450 kV/in @Thickness 0.126 in	in oil; ASTM D 149
Dissipation Factor	0.0070 @Frequency 1.00e+6 Hz	0.0070 @Frequency 1.00e+6 Hz	ASTM D 150
	0.027 @Frequency 50.0 - 60.0 Hz	0.027 @Frequency 50.0 - 60.0 Hz	ASTM D 150
Arc Resistance	60 - 120 sec	60 - 120 sec	Tungsten, PLC code 6; ASTM D 495

Comparative Tracking Index Electrical Properties	250 - 400 V Metric	250 - 400 V English	PL C code 2: UL 746A Comments
Hot Wire Ignition, HWI	>= 120 sec	>= 120 sec	PLC code 0; UL 746A
High Amp Arc Ignition, HAI	0.00 - 15 arcs	0.00 - 15 arcs	surface, PLC code 4; UL 746A
High Voltage Arc-Tracking Rate, HVTR	25.4 - 80.0 mm/min	1.00 - 3.15 in/min	PLC code 2; UL 746A

Descriptive Properties	Value	Comments
Radiant Panel Listing	YES	UL Tested
UV-light, water exposure/immersion	F1	UL 746C

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China