

Product Texts

NORYL NH8006 resin is a 30% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable and extrusion grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of 5VA and V0 at 2mm along with a UL746C Outdoor Suitability rating of F1. NORYL NH8006 resin offers an exceptional balance of strength and dimensional stability and is an excellent candidate for electrical and electronic applications.

UL Yellow Card [E121562-100066499](#)

UL Yellow Card [E121562-100100468](#)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	6	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	10	kg	-
ASTM Data			
Melt Flow Index, MFI	2.1	g/10min	ASTM D 1238
Temperature	280	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.00225	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9000	MPa	ISO 527
Yield stress	125	MPa	ISO 527
Yield strain	1.8	%	ISO 527
Stress at break	125	MPa	ISO 527
Strain at break	1.8	%	ISO 527
Flexural modulus, 23°C	8000	MPa	ISO 178
Charpy notched impact strength, +23°C	9	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	26	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	8	kJ/m ²	ISO 180/1A
Izod notched impact strength	8	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	9500	MPa	ASTM D 638
Tensile Strength at Yield	125	MPa	ASTM D 638
Tensile Strength at Break	125	MPa	ASTM D 638
Elongation at Yield	2	%	ASTM D 638
Elongation at Break	2	%	ASTM D 638
Flexural Modulus	8600	MPa	ASTM D 790
Izod Impact notched, 1/8 in	85	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	75	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	500	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	149	°C	ISO 75-1/-2
Vicat softening temperature, B	156	°C	ISO 306
Coeff. of linear therm. expansion, parallel	37	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	55	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-1	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	2.0	mm	-
Yellow Card available	yes	-	-

NORYL™ Resin NH8006 Americas

(PPE+PS)-GF30

Saudi Basic Industries Corporation (SABIC)

Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
Yellow Card available	yes	-	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	3.2	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	37	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	55	E-6/K	ASTM D 696
DTUL @ 264 psi	149	°C	ASTM D 648
Vicat Temperature	156	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.1	-	IEC 62631-2-1
Dissipation factor, 1MHz	40	E-4	IEC 62631-2-1
Surface resistivity	5E17	Ohm	IEC 62631-3-2
Electric strength	16	kV/mm	IEC 60243-1
Comparative tracking index	212	-	IEC 60112
ASTM Data			
Dissipation Factor, 1 MHz	0.004	-	ASTM D 150
Dielectric Constant, 1 MHz	3.11	-	ASTM D 150
Surface Resistivity	4E17	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.23	%	Sim. to ISO 62
Humidity absorption	0.07	%	Sim. to ISO 62
Density	1340	kg/m ³	ISO 1183
Density	1330	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110 - 120	°C	-
Pre-drying - Time	2 - 3	h	-
Melt temperature	300 - 320	°C	-
Mold temperature	100 - 130	°C	-
Feed temperature	80 - 100	°C	-
Zone 1	260 - 280	°C	-
Zone 2	280 - 300	°C	-
Zone 3	300 - 320	°C	-
Nozzle temperature	280 - 300	°C	-

Characteristics**Processing**

Injection Molding, Other Extrusion

Special Characteristics

Flame retardant, Halogen-free

Features

Creep Resistance

Applications

Electrical and Electronical

Regional Availability

North America, South and Central America