

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.

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
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

NORYL™ Resin NH8006 Asia

(PPE+PS)-GF30

Saudi Basic Industries Corporation (SABIC)

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

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

Asia Pacific