

**Product Texts**

NORYL™ NH4030B resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This high flow, injection moldable and extrusion grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of V0 at 1.5mm along with lower smoke production upon burning and low specific gravity for light-weight parts. NORYL NH4030B resin may be an excellent candidate for rail interior, electrical conduit, cable management, and ceiling-mounted electric applications.

UL Yellow Card Link [E121562-100880699](https://www.ul.com/yellow-card/E121562-100880699)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	41	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	5	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	42.7	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2430	MPa	ISO 527
Yield stress	54	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	47	MPa	ISO 527
Strain at break	27.8	%	ISO 527
Flexural modulus	2380	MPa	ISO 178
Charpy notched impact strength, +23°C	19	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	15	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	11	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2450	MPa	ASTM D 638
Tensile Strength at Yield	56	MPa	ASTM D 638
Tensile Strength at Break	46	MPa	ASTM D 638
Elongation at Yield	4.2	%	ASTM D 638
Elongation at Break	27.5	%	ASTM D 638
Flexural Modulus	2400	MPa	ASTM D 790
Izod Impact notched, 1/8 in	200	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	117	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	107	°C	ISO 75-1/-2
Vicat softening temperature, B	127	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	128	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	106	°C	ASTM D 648
Vicat Temperature	127	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.27	%	Sim. to ISO 62
Humidity absorption	0.04	%	Sim. to ISO 62
Density	1110	kg/m <sup>3</sup>	ISO 1183
Density	1110	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>95 - 105</b>	°C	-
Pre-drying - Time	<b>2 - 4</b>	h	-
Processing humidity	<b>≤0.07</b>	%	-
Melt temperature	<b>260 - 290</b>	°C	-
Mold temperature	<b>65 - 100</b>	°C	-
Zone 1	<b>225 - 275</b>	°C	-
Zone 2	<b>240 - 280</b>	°C	-
Zone 3	<b>250 - 290</b>	°C	-
Screw speed	<b>20 - 100</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics**

**Processing**

Injection Molding, Profile Extrusion, Sheet Extrusion

**Applications**

Automotive

**Additives**

Flame retarding agent

**Regional Availability**

North America

**Special Characteristics**

Flame retardant