

NORYL™ Resin BN31 - Americas

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL™ BN31 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This blow moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of 5VA at 2.5mm and V0 at 1.5mm along with a UL746C Outdoor Suitability rating of F1. NORYL BN31 resin exhibit good low temperature impact strength, heat resistance, excellent processability, Low warpage, and dimensional stability. The material is an excellent candidate for blow molded applications such as hospital bed headboard, cladding, tray.

UL Yellow Card Link [E121562-221152](https://www.ulprospector.com/usa/Products/Plastics/221152)

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Yield	48	MPa	ASTM D 638
Flexural Modulus	2410	MPa	ASTM D 790
Izod Impact notched, 1/8 in	267	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	106	J/m	ASTM D 256
Temperature	-40	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at 1.5 mm nom. thickn. Thickness tested	V-0 1.5	class mm	IEC 60695-11-10 -
Burning behav. 5V at thickness h Thickness tested	5VA 3.0	class mm	IEC 60695-11-20 -

Other properties	Value	Unit	Test Standard
Density	1100	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	95	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Pre-drying - Temperature	95	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	210 - 215	°C	-
Mold temperature	50 - 70	°C	-
Zone 1	215 - 205	°C	-
Zone 2	205 - 215	°C	-
Zone 3	205 - 215	°C	-
Zone 4	210 - 215	°C	-
Zone 5	210 - 215	°C	-

Characteristics**Processing**

Blow Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

North America