NORYL™ Resin N1050 - Americas

(PPE+PS) Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL™ N1050 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade was designed for improved dimensional stability and flow. This 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 impact strength, very low moisture absorption, excellent dimensional stability, and good electrical properties. NORYL N1050 resin is an excellent candidate for a variety of applications requiring electrically insulating properties, low moisture absorption and low warpage.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	**17**	g/10min	ASTM D 1238
Temperature	**250**	°C	-
Load	**10**	kg	-

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Flexural Modulus	**2530**	MPa	ASTM D 790
Flexural Strength	**98**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**117**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Burning behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**2.5**	mm	-

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dissipation Factor, 60 Hz	**0.003**	-	ASTM D 150
Dielectric Constant, 60 Hz	**2.78**	-	ASTM D 150
Surface Resistivity	**>1E15**	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	**1100**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**75 - 80**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**250 - 275**	°C	-
Mold temperature	**55 - 75**	°C	-
Zone 1	**215 - 265**	°C	-
Zone 2	**225 - 270**	°C	-
Zone 3	**240 - 275**	°C	-
Screw speed	**20 - 100**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing

Injection Molding

Applications

Automotive

Additives

Flame retarding agent

Regional Availability

North America

Special Characteristics

Flame retardant