NORYL™ Resin NHP5054 - Asia

(PPE+PS)-GF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL™ NHP5054 resin is a 20% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of V0 at 0.75mm for thin-wall molding capability. NORYL NHP5054 is based on a unique co-polymer technology and exhibits good dimensional stability, high heat resistance, strong electrical performance, and very low specific gravity. It is an excellent candidate for electrical vehicle (EV) battery housings, automotive under-the-hood enclosures and components where thin-wall FR, modulus retention, and high heat resistance are required.

UL Yellow Card Link E207780-101793092

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	**24**	g/10min	ASTM D 1238
Temperature	**250**	°C	-
Load	**10**	kg	-

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Yield	**120**	MPa	ASTM D 638
Elongation at Break	**2.5**	%	ASTM D 638
Izod Impact notched, 1/8 in	**100**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-

Other properties	Value	Unit	Test Standard
Density	**1300**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**105 - 110**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**280 - 310**	°C	-
Mold temperature	**75 - 105**	°C	-
Zone 1	**250 - 300**	°C	-
Zone 2	**260 - 305**	°C	-
Zone 3	**270 - 310**	°C	-
Screw speed	**20 - 100**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Additives
Flame retarding agent

Special Characteristics
Flame retardant

Applications
Automotive

Regional Availability
Asia Pacific