

NORYL™ Resin HMC1010

(PPE+PS)-CF10

Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL HMC1010 compound is based on Polyphenylene Ether (PPE) resin containing 10% carbon fiber. Added features of this grade include: Electrically Conductive, Non-Chlorinated, Non-Brominated Flame Retardant.

UL Yellow Card Link [E121562-221166](https://www.ul.com/yellow-card/E121562-221166)

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Yield	79	MPa	ASTM D 638
Tensile Strength at Break	71	MPa	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Rockwell Hardness	R 122	-	ASTM D 785
Taber Abrasion Resistance	83	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/8 in	69	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	240	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	2.0	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.0	mm	-

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	13000	Ohm	ASTM D 257
Volume Resistivity	8000	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1150	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	90 - 95	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	255 - 280	°C	-
Mold temperature	65 - 90	°C	-
Zone 1	220 - 270	°C	-
Zone 2	230 - 275	°C	-
Zone 3	245 - 280	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Increased electrical conductivity, Flame retardant

Additives

Flame retarding agent

Regional Availability

North America, Europe, Asia Pacific