

NORYL™ Resin TP1000

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL TP1000 resin is a high heat, transparent, hydro-stable, non-reinforced, high-purity blend of polyphenylene ether (PPE) + general purpose polystyrene (GPPS). This injection moldable material is FDA food contact compliant and black spec controlled, which can be an excellent candidate for food contact, small appliance housings, and for industrial additive use.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	14.8	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.006	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Flexural Modulus	2800	MPa	ASTM D 790
Flexural Strength	119	MPa	ASTM D 790
Izod Impact notched, 1/8 in	31	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 264 psi	149	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.07	%	ASTM D 570
Density	1080	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110 - 120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	300 - 325	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	265 - 315	°C	-
Zone 2	275 - 320	°C	-
Zone 3	290 - 325	°C	-
Nozzle temperature	300 - 325	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Heat stabilized or stable to heat, Transparent

Features

Amorphous, Low Warpage

Chemical Resistance

Hydrolytically Stable

Certifications

Food contact, Food approval FDA 21 CFR

Applications

Electrical and Electronical, Packaging

Regional Availability

North America, Europe, Asia Pacific, South and Central America