

FLEX NORYL™ Resin WCP921 - Europe
(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

Product Texts

FLEX NORYL™ WCP921 resin is a high flow, flexible, non-reinforced injection moldable blend of Polyphenylene Ether (PPE) + Styrene Ethylene Butylene Styrene (SEBS) + Polyolefin. This material contains non-halogenated flame retardant and carries a UL94 flame rating of V0 at 6mm. FLEX NORYL WCP921 resin is intended for evaluation in over-molding applications such as plugs, strain reliefs, and connectors. It has a Shore A Hardness reading of 88 and exhibits low specific gravity, very low water absorption, and dimensional stability.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	17	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.55	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.65	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	15	MPa	ISO 527
Strain at break	50	%	ISO 527
ASTM Data			
Tensile Strength at Break	15	MPa	ASTM D 638
Elongation at Break	150	%	ASTM D 638
Shore A Hardness	88	-	ASTM D 2240

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.8	-	IEC 62631-2-1
Dissipation factor, 1MHz	290	E-4	IEC 62631-2-1
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1040	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	60 - 80	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.01	%	-
Melt temperature	220 - 250	°C	-
Mold temperature	40 - 60	°C	-
Zone 1	180 - 220	°C	-
Zone 2	210 - 240	°C	-
Zone 3	220 - 250	°C	-
Screw speed	30 - 80	rpm	-
Back pressure	3 - 10	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant

Additives
Flame retarding agent

Regional Availability
Europe