

**FLEX NORYL™ Resin WCP921A - Americas**

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

FLEX NORYL™ WCP921A resin is a 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 WCP921A resin is intended for evaluation in over-molding applications such as plugs, strain reliefs, and connectors. It has a Shore A Hardness reading of 92 and exhibits low specific gravity, very low water absorption, and dimensional stability.

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Melt Flow Index, MFI	<b>10</b>	g/10min	ASTM D 1238
Temperature	<b>250</b>	°C	-
Load	<b>2.16</b>	kg	-
Mold Shrinkage, MD	<b>0.4</b>	mm/mm	ASTM D 955
Mold Shrinkage, TD	<b>0.4</b>	mm/mm	ASTM D 955

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Stress at break	<b>9</b>	MPa	ISO 527
Strain at break	<b>50</b>	%	ISO 527
<b>ASTM Data</b>			
Tensile Strength at Break	<b>9</b>	MPa	ASTM D 638
Elongation at Break	<b>120</b>	%	ASTM D 638
Shore A Hardness	<b>92</b>	-	ASTM D 2240

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Relative permittivity, 1MHz	<b>2.8</b>	-	IEC 62631-2-1
Dissipation factor, 1MHz	<b>60</b>	E-4	IEC 62631-2-1
Comparative tracking index	<b>600</b>	-	IEC 60112
<b>ASTM Data</b>			
Volume Resistivity	<b>&gt;1E15</b>	Ohm*cm	ASTM D 257

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1040</b>	kg/m <sup>3</sup>	ASTM D 792

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

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Flame retardant

**Additives**

Flame retarding agent

**Regional Availability**

North America