

**FLEX NORYL™ Resin WCD891B - Europe**

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

FLEX NORYL™ WCD891B resin is a flexible, non-reinforced extrudable blend of Polyphenylene Ether (PPE) + Thermoplastic Elastomer (TPE). This material contains non-halogenated flame retardant and performance capable of meeting UL VW-1 requirements, 80C end use temperature rating, and heat deformation performance as defined by UL 1581. FLEX NORYL WCD891B resin is intended for evaluation in wire and cable applications in dark colors. It has a Shore A Hardness reading of 89 and exhibits superior thermal stability, very low water absorption, good electric properties, and low specific gravity. Processing is typically conducted on standard extrusion equipment, and UL 1581 testing is conducted on 2.0mm wire with 0.12mm X 20 stranded copper conductor.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Melt Flow Index, MFI	20	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Yield strain	140	%	ISO 527
Stress at break	15	MPa	ISO 527
<b>ASTM Data</b>			
Tensile Strength at Break	16	MPa	ASTM D 638
Elongation at Break	170	%	ASTM D 638
Shore A Hardness	89	-	ASTM D 2240

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 1MHz	2.9	-	IEC 62631-2-1
Dissipation factor, 1MHz	400	E-4	IEC 62631-2-1
Comparative tracking index	600	-	IEC 60112
<b>ASTM Data</b>			
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1100	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Screw speed	15 - 85	rpm	-

**Characteristics****Additives**

Flame retarding agent

**Regional Availability**

Europe

**Special Characteristics**

Flame retardant