

**FLEX NORYL™ Resin WCD933 - Americas**

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

FLEX NORYL™ WCD933 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 EN 50265-2-1 requirement. FLEX NORYL WCD795 resin is intended for evaluation in AC cable insulation applications such as HD 21.14 flexible cables. It has a Shore A Hardness reading of 93 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	8.5	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Stress at break	9	MPa	ISO 527
Strain at break	50	%	ISO 527
<b>ASTM Data</b>			
Tensile Strength at Break	9	MPa	ASTM D 638
Elongation at Break	130	%	ASTM D 638
Shore A Hardness	93	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Glow Wire Flammability Index (GWFI)	750	°C	IEC 60695-2-12
GWFI - thickness tested (1)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Comparative tracking index	600	-	IEC 60112
<b>ASTM Data</b>			
Dissipation Factor, 1 MHz	0.001	-	ASTM D 150
Dielectric Constant, 1 MHz	3	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1330	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**

North America

**Special Characteristics**

Flame retardant