

**FLEX NORYL™ Resin WCD915 - Americas**

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

FLEX NORYL™ WCD915 resin is a flexible, UV stabilized, non-reinforced extrudable blend of Polyphenylene Ether (PPE) + Thermoplastic Elastomer (TPE). This material contains non-halogenated flame retardant and performance capable of meeting UL 1581 VW-1 requirement and 90C or 105C end use temperature rating as defined by UL 62 TPE category. FLEX NORYL WCD915 resin is intended for evaluation in wire and cable applications such as cable insulation materials. It has a Shore A Hardness reading of 91 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	9	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Stress at break	14	MPa	ISO 527
Strain at break	50	%	ISO 527
<b>ASTM Data</b>			
Tensile Strength at Break	15	MPa	ASTM D 638
Elongation at Break	170	%	ASTM D 638
Shore A Hardness	91	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°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	0.033	-	ASTM D 150
Dielectric Constant, 1 MHz	2.6	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1030	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