

FLEX NORYL™ Resin WCD933 - Europe

(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
ASTM Data			
Melt Flow Index, MFI	8.5	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	9	MPa	ISO 527
Strain at break	50	%	ISO 527
ASTM Data			
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
ISO Data			
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
ISO Data			
Comparative tracking index	600	-	IEC 60112
ASTM Data			
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 ³	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