

FLEX NORYL™ Resin WCD855 - Americas

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

Product Texts

FLEX NORYL™ WCD855 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 1581 VW-1 requirements. FLEX NORYL WCD855 resin is intended for evaluation in AC cable jacket applications that require UL62 at 90C or 105C temperature rating and black color. It has a Shore A Hardness reading of 85 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.

UL Yellow Card Link [F207780-101533056](https://www.ul.com/yellow-card/F207780-101533056)

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	16	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	16	MPa	ISO 527
Strain at break	50	%	ISO 527
ASTM Data			
Tensile Strength at Break	16	MPa	ASTM D 638
Elongation at Break	260	%	ASTM D 638
Shore A Hardness	85	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	6.0	mm	-
Glow Wire Flammability Index (GWFI)	850	°C	IEC 60695-2-12
GWFI - thickness tested (2)	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
ISO Data			
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Dissipation Factor, 1 MHz	0.007	-	ASTM D 150
Dielectric Constant, 1 MHz	2.4	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1010	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

North America

Special Characteristics

Flame retardant