

FLEX NORYL™ Resin WCA901 - Americas

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

Product Texts

FLEX NORYL™ WCA901 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, 105C end use temperature rating, and heat deformation performance as defined by UL 1581. FLEX NORYL WCA901 resin is intended for evaluation in wire and cable applications. 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
ASTM Data			
Melt Flow Index, MFI	10	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	22	MPa	ISO 527
Strain at break	50	%	ISO 527
ASTM Data			
Tensile Strength at Break	23	MPa	ASTM D 638
Elongation at Break	110	%	ASTM D 638
Shore A Hardness	91	-	ASTM D 2240

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.7	-	IEC 62631-2-1
Dissipation factor, 1MHz	40	E-4	IEC 62631-2-1
Comparative tracking index	600	-	IEC 60112
ASTM Data			
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 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