

SABIC® 324CNJ

324CNJ is a Linear Low Density Polyethylene TNPP free grade designed for wire and cable applications. It contains low level of antioxidants and does not contain any slip and antiblock additives. Sufficient antioxidant and Cu-inhibitor should be added to meet specific ageing requirements. For jacketing applications, addition of Carbon Black or UV stabilizer is required.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.924 g/cc	0.0334 lb/in ³	ASTM D1505
Melt Flow	3.6 g/10 min @Load 2.16 kg, Temperature 190 °C	3.6 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	53	53	ISO 868
Tensile Strength at Break	18.0 MPa	2610 psi	Based on Injection molded specimens.; ASTM D638
Tensile Strength, Yield	11.0 MPa	1600 psi	Based on Injection molded specimens.; ASTM D638
Film Elongation at Yield, MD	14 %	14 %	Based on Injection molded specimens.; ASTM D638
Elongation at Break	600 %	600 %	Based on Injection molded specimens.; ASTM D638
1% Secant Modulus	225 MPa	32600 psi	Based on Injection molded specimens.; ASTM D638

Electrical Properties	Metric	English	Comments
Volume Resistivity	8.50e+15 ohm-cm	8.50e+15 ohm-cm	ASTM D257
Dielectric Constant	2.2 @Frequency 60 Hz	2.2 @Frequency 60 Hz	ASTM D150
Dielectric Strength	>= 30.0 kV/mm 55.0 kV/mm	>= 762 kV/in 1400 kV/in	2000 V/sec; ASTM D149 500 V/sec; ASTM D149
Dissipation Factor	0.00050 @Frequency 60 Hz	0.00050 @Frequency 60 Hz	ASTM D150

Thermal Properties	Metric	English	Comments
Melting Point	121 °C	250 °F	Peak Melting Temperature; SABIC method