SABIC® LLDPE 318CNJ

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

318CNJ is a Linear Low Density Polyethylene TNPP free grade designed for wire and cable applications. It contains optimized 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.

TYPICAL APPLICATIONS

One-step or two-step Silane cross-linkable insulation for Low Voltage power insulation cable, Aerial bundle cable and suitable for telecommunication and Low Voltage power cable jacketing.

TYPICAL PROPERTY VALUES

Revision 20210609

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	2.8	g/10 min	ASTM D1238
Density	918	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Hardness (Shore D) (1)	51	-	ASTM D2240
FILM PROPERTIES			
Tensile Properties			
stress at yield	10	MPa	ASTM D638
stress at break	18	MPa	ASTM D638
strain at yield	17	%	ASTM D638
strain at break	555	%	ASTM D638
1% secant modulus	174	MPa	ASTM D638
THERMAL PROPERTIES			
Peak Melting Temperature	120	°C	SABIC method
ELECTRICAL PROPERTIES			
Volume Resistivity			
at 500V	6.8x10^17	Ω.cm	ASTM D257
Dielectric Constant			
at 1 kHz	2.25	-	ASTM D150
Dissipation Factor			
at 1 kHz	7.0x10^-4	-	ASTM D150
Dielectric Strength			
at 1000 V/sec	37	kV/mm	ASTM D149

(1) Based on Injection molded specimens.

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STORAGE AND HANDLING

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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