Alcudia® Low density polyethylene

Chemicals Technical data sheet

REPSOL

LDPE ALCUDIA® CP-104

DESCRIPTION

ALCUDIA® CP-104 is a natural and cross-linkable compound based on low density polyethylene, specifically designed to be cross-linked by organic peroxide. It contains a special antioxidant to guarantee thermal stability and causes minimum interference with the cross-linking process. The outstanding features of this grade are cleanliness, excellent thermal stability, good processing behaviour, excellent cross-linking efficiency at high speed and smooth surface finish.

ALCUDIA® CP-104 is normally supplied in octabins, tankers and van-boxes.

TYPICAL APPLICATIONS

Medium voltage power cable insulation.

Processing conditions of ALCUDIA® CP-104 are dependent on formulation and technique employed but it is noteworthy that this grade is suitable to use in a temperature range of 120ºC - 130ºC.

ALCUDIA® CP-104 meets the following standards: ISO 1872 PE KHN 18D022; ASTM D 1248 I,A3 Grade E5.

PROPERTIES	VALUE	UNIT	TEST METHOD
Generales			
Melt Flow rate (190ºC/2,16 kg)	2.4	g/10 min	ISO 1133
Density at 23°C	920	kg/m^3	ISO 1183
Mechanical			
Tensile Strain at Break	14	MPa	ISO 527-2
Elongation at break	600	%	ISO 527-2
Retention of mechanical properties after ageing 100°C, 10 days (*)	≥75	%	ISO 527
Hot-Set (200°C, 20 N/cm^2) (*)	<60	%	IEC 811-2-1
Thermal			
Vicat Softening Temperature (10 N)	91	ºC	ISO 306
Electrical			
Dielectric Constant (1 MHz)	2.3	-	ASTM D 1531
Dielectric Dissipation Factor (1 MHz)	5E-3	-	ASTM D 1531
Volume Resistivity DC at 23°C	>1E16	ohm·cm	ASTM D 257
Dielectric Strength (50 Hz)	>22	kV/mm	EN – 60243-1

(*) 1.9% Peróxido

STORAGE

ALCUDIA® CP-104 should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 50ºC and protected from UV radiation. Storage under inappropriate conditions could initiate degradation processes which may have a negative influence on the processability and the properties of the transformed product.

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