

Alcudia® Low density polyethylene

Chemicals

Technical data sheet



LDPE ALCUDIA® CP-121

DESCRIPTION

ALCUDIA® CP-121 is high molecular weight, low density polyethylene compound designed for telephone and coaxial cables. This product provides a superior performance at high-speed extrusion together with a smooth surface finish of the cable. This grade contains a special stabilization system for protection against thermal and shear degradation during processing and it also contains a metal deactivator to ensure long-term ageing properties.

TYPICAL APPLICATIONS

Solid insulation for telephone cables

It is recommended a temperature profile between 150 – 220°C. Optimal processing conditions must be tuned for each production line, recommending to use filters and a break plate to increase the pressure in the cylinder and consequently improve the cable quality, homogenization and dispersion of pigments in the case of colored cable

ALCUDIA® CP-121 meets the following specifications: ISO 1872 PE KHN 23D003; ASTM D 1248 I, A5, Grade E5; NF C 32-060 ISM1; VDE 0207 Teil 2 2411.

PROPERTIES	VALUE	UNIT	TEST METHOD
Generales			
Melt Flow rate (190°C/2,16 kg)	0.35	g/10 min	ISO 1133
Density at 23°C	921	kg/m ³	ISO 1183
Oxidation Induction Time (200°C)	>30	min	UNE EN 728
Mechanical			
Tensile Strain at Break	16	MPa	ISO 527-2
Elongation at break	600	%	ISO 527-2
Retention of mechanical properties after ageing 100°C/10 days	≥70	%	ISO 527-2
Thermal			
Brittleness temperature (-76°C)	0	failures	ASTM D 746
Vicat Softening Temperature (10 N)	96	°C	ISO 306
Electrical			
Dielectric Constant (1 MHz)	2.3	-	ASTM D 1531
Dielectric Dissipation Factor (1 MHz)	3E-4	-	ASTM D 1531
Volume Resistivity DC at 23°C	>1E16	ohm-cm	ASTM D 257

STORAGE

ALCUDIA® CP-121 should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 50°C 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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This information is offered in good faith and meant only as a guide. The transformer or user will be, in each case, responsible for the processing conditions and the final use of the product. Freedom under patents, copyright and registered designs cannot be assumed.

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