

HDPE ALCUDIA[®] CAB4910

DESCRIPTION

ALCUDIA[®] CAB4910 is a high density polyethylene, designed for cable applications, with excellent mechanical properties and a suitable environmental stress cracking resistance. The material exhibits very good performance in high speed lines. It contains stabilizers against degradation due to harsh processing conditions as well as to guarantee a proper thermal protection over the cable lifetime.

TYPICAL APPLICATIONS

Solid insulation of telephone single. Jelly-filled telephone cable. Sheathing for energy and fiber optic cables.

ALCUDIA[®] CAB4910 can be extruded in a wide range of processing conditions. We recommend melt temperatures between 240°C - 270°C. The optimal conditions depend on the application and the extrusion equipment used.

PROPERTIES ¹	VALUE	UNIT	TEST METHOD
General			
Melt flow rate (190°C/2.16 kg)	0.90	g/10 min	ISO 1133
Density at 23°C	949	kg/m ³	ISO 1183
Weight increase by gel absorption (10 days, 70°C)	< 10	%	IEC 811-4-2
Long term stability	0	failures	IEC 811-4-2
Oxidation induction time (200°C)	> 60	min	UNE EN 728
Environmental stress cracking resistance (ESCR) (F0)	> 48	h	ASTM D 1693
Mechanical			
Tensile strength	> 20	MPa	ISO 527-2
Elongation at break	> 700	%	ISO 527-2
Retention of mechanical properties after ageing 100°C/10 days	≥ 75	%	ISO 527-2
Thermal			
Brittleness temperature (-76°C)	0	failures	ASTM D 746
Vicat softening temperature (10 N)	123	°C	ISO 306
Electrical			
Dielectric constant (1 MHz)	2,31	-	ASTM D 1531
Dielectric dissipation factor (1 MHz)	4,6E-4	-	ASTM D 1531

¹Being a new development, minor variations could be expected in the future

STORAGE

ALCUDIA[®] CAB4910 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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