

Alcudia® High density polyethylene

Chemicals

Technical data sheet



HDPE ALCUDIA® C-240-UV

DESCRIPTION

ALCUDIA® C-240-UV is a natural high molecular weight and high density polyethylene that gives to the compound the following features: excellent processability; high abrasion resistance; good mechanical properties; excellent environmental stress cracking resistance (ESCR) and superior compatibility with pigments. It contains an antioxidant system which warranties protection against thermal oxidation during processing and long term stability.

TYPICAL APPLICATIONS

Colour Jacketing for power and telecommunication cables.

It is recommended an extrusion melt temperature of 220°C and a temperature profile between 190 - 235°C. Optimal processing conditions must be tuned for each production line.

ALCUDIA® C-240-UV meets the following specifications: ISO 1872 PE KHN 40D001/003; ASTM D 1248 II, A5, J5; UNESA 3305C.

PROPERTIES	VALUE	UNIT	TEST METHOD
Generales			
Melt Flow rate (190°C/2,16 kg)	0.20	g/10 min	ISO 1133
Density at 23°C	938	kg/m ³	ISO 1183
Oxidation Induction Time (200°C)	>40	min	UNE EN 728
Environmental Stress Cracking Resistance (F50)	>1000	h	ASTM D 1693
Mechanical			
Tensile Strain at Break	28	MPa	ISO 527-2
Elongation at break	800	%	ISO 527-2
Retention of mechanical properties after ageing 110°C/14 days	≥75	%	ISO 527-2
50% retention of mechanical properties after ageing	≥600	h	-
Shore Hardness D	60	-	ISO 868
Thermal			
Brittleness temperature (-76°C)	0	failures	ASTM D 746
Vicat Softening Temperature (10 N)	126	°C	ISO 306
Electrical			
Dielectric Constant (1 MHz)	2.3	-	ASTM D 1531
Dielectric Dissipation Factor (1 MHz)	4E-4	-	ASTM D 1531

STORAGE

ALCUDIA® C-240-UV 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.

Technical Service and Development:
Repsol Technology Centre
Ctra. de Extremadura A5, Km 18
28931 Móstoles, Madrid
Tel. +34 91 753 86 00
atd_poliiolefinas@repsol.com

Headquarters:
Méndez Álvaro, 44
28045 Madrid
Spain
www.chemicals.repsol.com

Customer Care:
sacrq@repsol.com