TECHNICAL DATA SHEET

Repsol ALCUDIA C240UV

REPSOL ALCUDIA C240UV is a natural high molecular weight and medium 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.

Applications:

- Black jacketing of power and telecommunication cables.

It is recommended an extrusion melt temperature of 220ºC and a temperature profile between 190 - 235ºC. Optimal processing conditions must be tuned for each production line.
REPSOL ALCUDIA C-240-UV meets the following specifications: ISO 1872 PE KHN 40D001/003; ASTM D 1248 II, A5, J5; UNESA 3305C

Properties:

Properties	Value	Unit	Test Method
GENERAL			
Melt flow rate (190ºC, 21,6kg)	21	g/10 min	ISO 1133
Density at 23 ºC	939	kg/m3	ISO 1183
Oxidation Induction Time (200ºC)	>40	min	UNE EN 728
Environmental Stress Cracking Resistance (F0)	>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 100ºC/14 days	≥75	%	ISO 527-2
Shore Hardness D (15 s)	59	-	ISO 868
Shore Hardness D (3 s)	59	-	ISO 868
THERMAL			
Brittleness temperature (-76ºC)	0	failures	ASTM D 746
Vicat Softening Temperature (10 N)	119	ºC	ISO 306
ELECTRICAL			
Dielectric Constant (1 MHz)	2.3	-	ASTM D 1531
Dielectric Dissipation Factor (1 MHz)	1.3E-4	-	ASTM D 1531

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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Storage:

The grade REPSOL ALCUDIA C240UV 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 or undesired migration of additives included in its formulation which may have a negative influence on the processability and the properties of the transformed product

Disclaimer:

This grade complies with the European regulations for materials for use in food contact. This grade is not intended to be used in medical, pharmaceutical, or healthcare applications, therefore Repsol does not authorize its use in them.

Repsol does not grant express or implicit guarantees that extend beyond the description contained herein. Nothing herein shall constitute any guarantee of merchantability or fitness for a particular purpose. Before using a product sold by Repsol, users must make their own independent determination that the product is safe, legal, and technically suitable for its intended use. Repsol does not assume any responsibility for the use of its materials together with other materials.

Related documents:

The following related documents are available on request, and represent various aspects on the usability and safety of the product:

- Safety data sheet.
- Statement on compliance with food contact regulations.

Recommended consumption period: 12 months from the date of delivery to the customer.

March 2026

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