

Technical data sheet

Chemicals



LDPE REPSOL ALCUDIA PE033

REPSOL ALCUDIA PE033 is a high molecular weight, low density polyethylene which offers easy processing combined with good mechanical properties. Its molecular characteristics make it be an excellent product for the Monosil process. The outstanding feature of this product is its cross-linking efficiency. This grade does not contain antioxidant therefore its addition is necessary to guarantee thermal stability of the final product.

Applications

- Insulation of low voltage cables.

The conditions of transformation and the quality of Silane used are the fundamental parameters to obtain adequate cross-linking and surface finish. It is recommended a melt temperature of 190-220°C. The temperature profile, however, will largely depends on the type of machine used.

REPSOL ALCUDIA PE033 meets the following standards: ISO 1872 KN 23D001/003; ASTM D 1248 I, A5 Grade E5.

PROPERTIES	VALUE	UNIT	TEST METHOD
Generales			
Melt Flow rate (190°C/2,16 kg)	0.3	g/10 min	ISO 1133
Density at 23°C	921	kg/m3	ISO 1183
Mechanical			
Tensile Strain at Break	16	MPa	ISO 527-2
Elongation at break	500	%	ISO 527-2
Thermal			
Vicat Softening Temperature (10 N)	92	°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

REPSOL ALCUDIA PE033 is not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

Storage

REPSOL ALCUDIA PE033 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 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.

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