

Alcudia® High density polyethylene

Chemicals

Technical data sheet



HDPE ALCUDIA® 49070UV

DESCRIPTION

ALCUDIA® 49070UV is a high-density polyethylene copolymer of hexene, with high molecular weight. It is especially designed to make, by blow molding, containers of medium and high capacity (up to 5000 litres), for petroleum derivatives. This grade contains stabilizers according to the end-use of the item in order to reinforce the thermal and light stability. It has an excellent environmental stress cracking resistance (ESCR) and impact resistance.

This grade is suitable to produce containers according to the Spanish UNE-53432 parts 1, 2 and 3 and the EN 13341 in Europe, or NFM-88-560 in France. It is also included in the German DIBT list of materials to contain petroleum derivatives.

TYPICAL APPLICATIONS

IBC tanks and high capacity containers.

Recommended melt temperature range from 190 to 215°C. Processing conditions should be optimized for each production line.

PROPERTIES	VALUE *	UNIT	TEST METHOD
General			
Melt Flow Rate (190°C, 5.0 kg)	0.40	g/10 min	ISO 1133
Melt Flow Rate (190°C, 21.6 kg)	9.0	g/10 min	ISO 1133
Density at 23°C	949	kg/m ³	ISO 1183
Mechanical			
Tensile Strength at Break	30	MPa	ISO 527-2
Elongation at break	800	%	ISO 527-2
Tensile Strength at Yield	25	MPa	ISO 527-2
Flexural modulus of elasticity	1000	MPa	ISO 178
Other			
Vicat Softening Temperature (10 N)	127	°C	ISO 306
Shore Hardness D	65	°	ISO 868
Environmental Stress Cracking Resistance (F ₅₀)	>400	h	ASTM D-1693 (1)

* Typical values – Not to be considered as specification
(1) 10% Igepal, 50°C

ALCUDIA® 49070UV complies with the European Directives regarding materials intended for contact with foodstuffs. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

STORAGE

ALCUDIA® 49070UV should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60°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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