

Alcudia® High density polyethylene

Chemicals

Technical data sheet



HDPE ALCUDIA® 53070

DESCRIPTION

ALCUDIA® 53070 is a high-density polyethylene copolymer of hexene, with high molecular weight. It is especially designed to make, by blow moulding, tanks of medium and high capacity. Also for thermoforming sheets.

This grade contains stabilisers 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)

It has an excellent stiffness and impact resistance, and high chemical resistance, so it's recommended to Jerrican containers.

TYPICAL APPLICATIONS

Blow moulding of jerrican containers.

Recommended melt temperature range from 180 to 210°C. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE *	UNIT	TEST METHOD
General			
Melt Flow Rate (190°C, 5.0 kg)	0.30	g/10 min	ISO 1133
Melt Flow Rate (190°C, 21.6 kg)	7.0	g/10 min	ISO 1133
Density at 23°C	953	kg/m ³	ISO 1183
Mechanical			
Tensile Strength at Break	35	MPa	ISO 527-2
Elongation at break	950	%	ISO 527-2
Tensile Strength at Yield	25	MPa	ISO 527-2
Flexural modulus of elasticity	1200	MPa	ISO 178
Other			
Vicat Softening Temperature (10 N)	128	°C	ISO 306
Shore Hardness D	63	°	ISO 868
Environmental Stress Cracking Resistance (F ₅₀)	>190	h	ASTM D-1693 (1)

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

ALCUDIA® 53070 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® 53070 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.

November 2013

*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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