

Alcudia® High density polyethylene

Chemicals

Technical data sheet



HDPE ALCUDIA® 55045

DESCRIPTION

ALCUDIA® 55045 is a bimodal high-density polyethylene with high molecular weight. It is especially designed to make, by blow moulding, tanks of medium and high capacity and jerricans for the transportation of dangerous goods. This grade contains stabilisers according to the end-use of the item in order to reinforce the thermal stability.

It has an excellent stiffness and cracking resistance balance, so it's recommended to Jerrican containers for the transportation of dangerous goods.

TYPICAL APPLICATIONS

Blow moulding of medium, high capacity containers and jerricans.

Recommended melt temperature range from 180 to 220°C. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE *	UNIT	TEST METHOD
General			
Melt Flow Rate (190°C, 21.6 kg)	5.0	g/10 min	ISO 1133
Density at 23°C	955	kg/m ³	ISO 1183
Mechanical			
Tensile Strength at Break	40	MPa	ISO 527-2
Elongation at break	850	%	ISO 527-2
Tensile Strength at Yield	28	MPa	ISO 527-2
Flexural modulus of elasticity	1100	MPa	ISO 178
Charpy Impact Strength (-30°C, notched)	22	kJ/m ²	ISO 179
Other			
Environmental Stress Cracking Resistance (F ₅₀)	>1000	h	ASTM D-1693 (1)

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

ALCUDIA® 55045 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® 55045 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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