

Alcudia® High density polyethylene

Chemicals

Technical data sheet



HDPE ALCUDIA® 4810

DESCRIPTION

ALCUDIA® 4810 is a copolymer of hexene with medium molecular weight. It is specially designed to make, by blow molding, bottles of sterilized milk. This grade contains a package of additives that includes the antioxidant necessary to reinforce the thermal stability.

Excellent behavior in extrusion and sterilization process. Its characteristics confers it high impact strength. On the other hand its good viscoelastic behavior allows an easy recovering of the mould-shape after the sterilization process and storage.

TYPICAL APPLICATIONS

- Bottles of sterilized milk.
- Injection of stoppers and other articles.

Recommended melt temperature range from 170 to 190°C. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE *	UNIT	TEST METHOD
General			
Melt Flow Rate (190°C, 2.16 kg)	1.0	g/10 min	ISO 1133
Melt Flow Rate (190°C, 21.6 kg)	50	g/10 min	ISO 1133
Density at 23°C	950	kg/m ³	ISO 1183
Mechanical			
Tensile Strength at Break	21	MPa	ISO 527-2
Elongation at break	720	%	ISO 527-2
Flexural modulus of elasticity	1000	MPa	ISO 178
Other			
Vicat Softening Temperature (10 N)	126	°C	ISO 306
Shore Hardness D	65	°	ISO 868
Environmental Stress Cracking Resistance (F ₅₀)	25	h	ASTM D-1693 (1)

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

ALCUDIA® 4810 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® 4810 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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