

Alcudia® High density polyethylene

Chemicals

Technical data sheet



HDPE ALCUDIA® 51100

ALCUDIA® 51100 is a high density polyethylene with a broad bimodal molecular weight distribution designed for the extrusion of pipes. It also can be used as base polymer for identification stripes compound. This product is supplied in natural colour but they can be easily coloured with pigments steady at processing temperature, using dry-colouring or masterbatch techniques. This grade is characterized by its very good mechanical properties, excellent cracking resistance and good resistance to internal pressure.

TYPICAL APPLICATIONS

- Pipes general purposes.
- Base polymer for identification stripes compound.

Recommended melt temperature range 200 - 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)	10.0	g/10 min	ISO 1133
Melt Flow Rate (190°C, 5 kg)	0,38	g/10 min	ISO 1133
Density at 23°C	951	kg/m ³	ISO 1183
Mechanical			
Tensile Strength at Break	38	MPa	ISO 527-2
Tensile Strain at Break	> 600	%	ISO 527-2
Flexural modulus of elasticity	1100	MPa	ISO 178
Others			
ESCR (F50) (Igepal 10%)	> 10000	h	ASTM D-1693
Brittleness temperature	< -70	°C	ASTM D-746
Vicat Softening temperature (10 N)	125	°C	ISO 306
Shore Hardness D	60	-	ISO 868

ALCUDIA® 51100 high density polyethylene 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® 51100 high density polyethylene 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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