ELTEX® LGB163N2045

Product Technical Information

High Density Polyethylene – Milk blow moulding resins

Benefits & Features

ELTEX® LGB163N2045 high density polyethylene is a white homopolymer manufactured by INEOS O&P Europe. It contains 5% titanium dioxide and is intended for the co-extrusion of bottles for the packaging of UHT sterilized milk.

The resin is specifically designed for 1-, 3- or 6- layer bottles.

It guarantees the preservation of the organoleptic properties of milk and has the following essential properties :

- High density, ensuring good rigidity of finished products
- A melt viscosity which ensures easy processing
- A very low odour level

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16kg	ISO 1133-1	0.4	g/10min
Apparent dynamic viscosity(2)	190°C and 100 s-1	INEOS Test Method	1400	Pa.s
Physical				
Density ISO 1872-1(1)	23°C	ISO 1183-1	990	kg/m³
Mechanical				
Tensile strength at yield	23°C, 50mm/min	ISO 527-2	30	MPa
Tensile Modulus	23°C, 1 mm/min	ISO 527-2	1250	MPa
Charpy Impact Strength, notched	23°C	ISO 179-1/1eA	10	kJ/m²
FNCT (full notched creep test)	40°C, 6 N/mm² 2% Arkopal N100	ISO 16770	9	h
Thermal				
Melting Temperature	DSC 2nd heating 10°C/min	ISO 11357-3	134	°C
Other				
Molecular weight distribution		INEOS Test Method	Medium	-

Data should not be used for specification work

(1) Compression-moulded discs, cooled at the rate of 15°C per minute

(2) Apparent dynamic viscosity of the material extruded at 190°C through a 1.0 mm diameter and 15 mm long die, at apparent shear rate 100 s^{-1}

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Compliance to Regulations

ELTEX® LGB163N2045 meets EU and FDA regulations governing the approval of materials used in the manufacture of packaging which may come into contact with food products.
INEOS will be happy to supply customers with certificates of conformity to the various national legislations.

Storage

The product should be stored in a dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration.
It is advised to process the product within maximum one year after delivery.