ELTEX® B4020LGN1963
ELTEX® B4020LG/34

Product Technical Information

High Density Polyethylene – Milk blow moulding resins

Benefits & Features

ELTEX® B4020LGN1963 high density polyethylene is a copolymer manufactured by INEOS O&P Europe using its supported catalyst process. It is a granular resin used for high-speed blow moulding of bottles. Its high purity makes it suitable for the packaging of both pasteurized and sterilized milk (in bottle sterilization).

ELTEX® B4020LG/34 contains 4.5 % titanium dioxide and is intended for the co-extrusion of bottles for the packaging of sterilized or UHT milk.

The resins guarantee the preservation of the organoleptic properties of milk and have the following essential properties:

- A very low odour level
- Good heat resistance
- Good impact resistance
- Good stress cracking resistance

Properties	Conditions	Test Methods	Values		Units
			B4020LGN1963	B4020LG/34	
Rheological					
Melt Flow Rate	190°C/2.16Kg	ISO 1133-1	1.8	1.8	g/10min
Apparent dynamic viscosity *	190°C and 100 s^{-1}	INEOS	1100	1100	Pa.s
Physical					
Density	23°C	ISO 1183-1	952	985	kg/m³
Mechanical					
Tensile strength at yield	23°C, 50mm/min	ISO 527-2	27	27	MPa
Tensile Modulus	23°C, 1 mm/min	ISO 527-2	1000	1000	MPa
Charpy Impact Strength, notched	23°C	ISO 179-1/1eA	6.5	6.5	kJ/m²
FNCT (full notched creep test)	40°C, 6 N/mm² 2% Arkopal N100	ISO 16770	14	14	h
Thermal					
Melting Temperature	DSC 2nd heating 10°C/min	ISO 11357-3	132.0	132.0	°C
Other					
Molecular weight distribution		INEOS	medium	medium	-

Data should not be used for specification work

* Apparent dynamic viscosity of the material extruded at 190°C through a 1.0 mm diameter and 15 mm long die

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Compliance to Regulations

ELTEX® B4020LGN1963 & **ELTEX® B4020LG/34** meet EU and FDA regulations governing the approval of materials used in the manufacture of packaging which may come into contact with food products. INEOS O&P Europe 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.