ELTEX® Superstress™ CAP504HRS3

Product Technical Information

ELTEX® Superstress™ CAP504HRS3 is a High Density Polyethylene copolymer manufactured by INEOS Olefins & Polymers Europe using its proprietary supported catalyst & process, particularly intended for the injection moulding of screw caps for the packaging of beverages.

Benefits & Features

- High Rigidity
- High stress cracking resistance
- Good processing performances despite its low MFR (monomodal MFR 4-like resin)
- Excellent quality controlled organoleptic properties.
- Grade containing a Slip Agent ensuring easy cap application and opening.

Applications

ELTEX® Superstress™ CAP504HRS3 is especially suited for the production of lightweight caps requiring high stiffness, excellent stress cracking resistance and good injectability. Thanks to high purity and excellent organoleptic properties it is well suited for packaging in direct contact with beverages and sensitive food..

- Injection Moulding of Caps & Closures for the packaging of sparkling water and carbonated soft drinks; especially in reduced weight cap designs

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16kg	ISO 1133-1	0.6	g/10min
Physical				
Density ISO 17855-1	23°C	ISO 1183-1	958	kg/m³
Mechanical				
Tensile Modulus	23°C, 1 mm/min	ISO 527-2	1400	MPa
Tensile Strength at Yield	23°C	ISO 527-1,-2	30	MPa
Charpy Impact Strength, notched	23°C	ISO 179-1/1eA	7	kJ/m²
Environmental Stress Cracking Resistance (ESCR) on cap	40°C, 6 bar, 10% Igepal	INEOS Test Method	47	h
Organoleptic				
Organoleptic properties		INEOS Test Method	Ok	

In order to preserve the excellent organoleptic properties, it is important not to exceed a melt temperature of 250°C during processing
Exposure to direct sunlight has to be avoided.

Data should not be used for specification work

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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.

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