ELTEX® Superstress™ CAP311S1

Product Technical Information

ELTEX® Superstress™ CAP311S1 is a High Density Polyethylene copolymer manufactured by INEOS Olefins & Polymers Europe using its proprietary supported catalyst & process, particularly intended for the injection and compression moulding of screw caps for the packaging of beverages.

Benefits & Features

- Very good injectability (MFR 11-like resin)
- High rigidity
- Good stress cracking resistance
- Improved rigidity/stress cracking resistance compromise
- Excellent quality controlled organoleptic properties
- Grade containing a highly effective slip agent ensuring easy cap application and opening

Applications

ELTEX® Superstress™ CAP311S1 is especially suited for applications requiring excellent processability, high rigidity and enhanced stress cracking resistance.. Thanks to high purity and excellent organoleptic properties it is well suited for packaging in direct contact with beverages and sensitive food.

- Injection Moulding and Compression Moulding of Caps & Closures for the packaging of aromatized waters, juices and slightly carbonated or pressurized beverages

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16kg	ISO 1133-1	4	g/10min
Physical				
Density ISO 17855-1	23°C	ISO 1183-1	960	kg/m³
Mechanical				
Tensile Modulus	23°C, 1 mm/min	ISO 527-2	1500	MPa
Tensile Strength at Yield	23°C	ISO 527-1,-2	31	MPa
Environmental Stress Cracking Resistance (ESCR) on 1881 cap	40°C, 2 bar, 10% surfactant	INEOS Test Method	54	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 as the slip agent is light sensitive and its degradation can give off-taste to the beverage.

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.

Regulatory Information

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website www.ineos.com where a specific Regulatory Certificate is available for each grade under the heading "SDS & Regulatory Certificate".

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical sectors.

Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website www.ineos.com. Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

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