# ELTEX® Superstress™ CAP311

## Product Technical Information

**ELTEX® Superstress™ CAP311** 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
- Slip agent free grade

## Applications

**ELTEX® Superstress™ CAP311** 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 still mineral water, 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 cap | 40°C, 4 bar, 10% Igepal | INEOS Test Method | 12 | 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**

## 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.