

# ELTEX<sup>®</sup> Superstress<sup>™</sup> CAP504HR

## Product Technical Information

ELTEX<sup>®</sup> Superstress<sup>™</sup> CAP504HR 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.
- Slip agent free grade.

## Applications

ELTEX<sup>®</sup> Superstress<sup>™</sup> CAP504HR 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
<b>Rheological</b>				
Melt Flow Rate	190°C/2.16kg	ISO 1133-1	0.6	g/10min
<b>Physical</b>				
Density ISO 17855-1	23°C	ISO 1183-1	958	kg/m <sup>3</sup>
<b>Mechanical</b>				
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/m <sup>2</sup>
Environmental Stress Cracking Resistance (ESCR) on cap	40°C, 6 bar, 10% Igepal	INEOS Test Method	47	h
<b>Organoleptic</b>				
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.