



ELTEX® Superstress™ CAP504HRS2

Product Technical Information

ELTEX® Superstress™ CAP504HRS2 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 highly effective Slip Agent ensuring easy cap application and opening.

Applications

ELTEX® Superstress™ CAP504HRS2 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 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/m ³ |
| 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/m ² |
| 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 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

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.