

Eltex® Superstress™ CAP602S2

High Density Polyethylene

INEOS Olefins & Polymers Europe

Technical Data

Product Description

Eltex® Superstress™ CAP602S2 is a high-density polyethylene copolymer manufactured by INEOS Polyolefins using its proprietary supported catalyst & process particularly intended for the injection moulding of screw caps for the packaging of beverages. It is especially suitable for applications requiring outstanding environmental stress cracking resistance and thanks to high purity and excellent organoleptic properties, particularly intended for packaging in direct contact with beverages.

Applications:

- Injection of caps & closures for the packaging of carbonated soft drinks
- Use in warm regions & cases, where ESCR can be a problem with standard grades
- Possibility to reach new designs with reduced cap weight

Benefits and Features:

- Outstanding stress cracking resistance
- Good processing performances
- Very high impact strength
- Excellent, quality controlled organoleptic properties. In order to preserve the excellent organoleptic properties, it is important not to exceed a melt temperature of 250°C during processing.
- Grade containing slip agent ensuring easy application and opening. 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.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Search for UL Yellow Card	• INEOS Olefins & Polymers Europe		
Availability	• Europe		
Additive	• Slip		
Features	• Copolymer • Food Contact Acceptable • Good Impact Resistance	• Good Organoleptic Properties • Good Processability • High Density	• High ESCR (Stress Crack Resist.) • High Purity • Slip
Uses	• Caps	• Closures	
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.953 g/cm³	ISO 1872-1
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.80 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance	> 40.0 hr	Internal Method

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1200 MPa	ISO 527-2/1B
Tensile Stress (Yield)	26.0 MPa	ISO 527-2/1B

Impact	Nominal Value Unit	Test Method
Charpy Unnotched Impact Strength (23°C)	9.0 kJ/m²	ISO 179

Injection	Nominal Value Unit
Processing (Melt) Temp	< 250 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.