

Eltex® Superstress™ CAP508S3

High Density Polyethylene Copolymer
INEOS Olefins & Polymers Europe

Technical Data

Product Description

Eltex® Superstress™ CAP508S3 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. It is especially suited for applications requiring excellent stress cracking resistance and enhanced processability. Thanks to high purity and excellent organoleptic properties it is well suited for packaging in direct contact with beverages and sensitive food.

Typical applications

- Injection Moulding and Compression Moulding of Caps & Closures for the packaging of sparkling water and carbonated soft drinks; especially in reduced weight cap designs
- Injection Moulding of thin wall packaging, especially for the food industry

Benefits and Features

- Very good processability
- High stress cracking resistance
- Excellent quality controlled organoleptic properties
- Grade containing a medium effective Slip Agent to reduce the friction at application and opening of caps.

Note : 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	• Medium Slip		
Features	• Copolymer • Good Organoleptic Properties	• Good Processability • High ESCR (Stress Crack Resist.)	• High Purity • Medium Slip
Uses	• Caps • Closures	• Food Packaging • Packaging	• Thin-walled Packaging
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Compression Molding	• Injection Molding	

Physical	Nominal Value Unit	Test Method
Density	0.953 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.8 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance 40°C	32.0 hr	Internal Method

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	1000 MPa	ISO 527-2/1B
Tensile Stress (Yield, 23°C)	26.0 MPa	ISO 527-2/1B

Impact	Nominal Value Unit	Test Method
Charpy Unnotched Impact Strength (23°C)	5.5 kJ/m²	ISO 179

Additional Information

In order to preserve the excellent organoleptic properties, it is important not to exceed a melt temperature of 250°C during processing.

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.