ELTEX® Superstress™ CAP602S2

Product Technical Information

ELTEX® Superstress™ CAP602S2 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

- Outstanding stress cracking resistance
- Good processing performances
- Very high impact strength
- Excellent quality controlled organoleptic properties
- Grade containing a highly effective slip agent ensuring easy cap application and opening

Applications

ELTEX® Superstress™ CAP602S2 is especially suited for applications requiring outstanding 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 of Caps & Closures for the packaging of carbonated soft drinks
- Use in high-demanding applications e.g. warm countries and very high carbonation levels
- Use in reduced weight cap designs

Properties	Conditions	Test Methods	Values	Units
Rheological				
Melt Flow Rate	190°C/2.16kg	ISO 1133-1	0.8	g/10min
Physical				
Density ISO 17855-1	23°C	ISO 1183-1	953	kg/m³
Mechanical				
Tensile Modulus	23°C, 1 mm/min	ISO 527-2	1200	MPa
Tensile Strength at Yield	23°C	ISO 527-1,-2	26	MPa
Charpy Impact Strength, notched	23°C	ISO 179-1/1eA	9.0	kJ/m²
Environmental Stress Cracking Resistance (ESCR) on 1881 cap	40°C, 6 bar, 10% surfactant	INEOS Test Method	95	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

April, 2026

Published by

INEOS Olefins & Polymers Europe

ELTEX® Superstress™ CAP602S2

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.

Regulatory Information

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website www.ineos.com where a specific Regulatory Certificate is available for each grade under the heading "SDS & Regulatory Certificate".

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical sectors.

Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website www.ineos.com. Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

Exclusion of Liability

Although INEOS O&P Europe endeavours to ensure that all information and advice relating to our materials or other materials howsoever provided to you by INEOS O&P Europe is accurate and up to date, no representation or warranty, express or implied is made by INEOS O&P Europe as to its accuracy or completeness. All such information and advice is provided in good faith and INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action you may take as a result of relying on such information or advice or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

In addition data and numerical results howsoever provided to you by INEOS O&P Europe are given in good faith and are general in nature. Data and numerical results are not and shall not be regarded as specifications and as such INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action that you take as a result of relying on such data and results or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

It remains at all times your responsibility to ensure that INEOS O&P Europe materials are suitable for the particular purpose intended and INEOS O&P Europe shall not be responsible for any loss or damage caused by misuse of INEOS O&P Europe products. To the maximum extent permitted by law, INEOS O&P Europe accepts no liability whatsoever arising out of the application, adaptation or processing of the products described herein, the use of other materials in lieu of INEOS O&P Europe materials or the use of INEOS O&P Europe materials in conjunction with such other materials.

April, 2026

Published by

INEOS Olefins & Polymers Europe