



Eltex® Superstress™ CAP602S2

Product Technical Information

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.

Typical 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.

Properties		Test Methods	Values	Units
Physical				
Density		ISO 1872	953	kg/m ³
Melt Flow Rate	2.16 kg load	ISO 1133	0.8	g/10min
Mechanical				
Tensile Modulus		ISO 527 -1&2 (1B)	1200	MPa
Tensile Strength	@ Yield	ISO 527 -1&2 (1B)	26	MPa
Charpy Impact Strength, 23°C		ISO 179	9.0	kJ/m ²
Environmental Stress Cracking Resistance (ESCR)		INEOS	> 40	h
Other				
Organoleptic properties		INEOS	OK	-

The values given are typical values measured on the product. These values should not be considered as specification



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The high performance HDPE product, produced with INEOS proprietary leading edge processes, is protected by some or all of the following patents and patents applications: EP603935B, EP134971A, EP1420046A, EP1482008A, EP1544244A, WO03/039984A; EP1441959A, EP1462378A, EP1468932A and EP1278797B.

Storage

Eltex® Superstress™ CAP602S2 should be stored in a dry dust free environment, away from direct sunlight exposure and at temperature below 45°C.