



CAP508US1 Polyethylene Copolymer

CAP508US1 is a high density bimodal polyethylene copolymer intended for the injection and compression molding of closures for beverages. Because of its high purity and excellent organoleptic properties, this grade is certified as low taste and is intended for packaging in direct contact with beverages. CAP508US1 exhibits excellent stress crack resistance needed for the production of closures intended for packaging of carbonated drinks. CAP508US1 contains a slip package for lower cap removal torques and improved capping performance. This material meets the Food and Drug Administration requirements of 21CFR 177.1520.

Applications

- Injection & Compression Molding
- Closures for the packaging of carbonated beverages and sparkling water
- Use in high-demanding applications such as warm climates
- Use in reduced weight cap designs

Benefits

- Outstanding stress cracking resistance
- Good processing performance

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.953 g/cc	D 4883
Melt Index ²	—	1.7 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3700 psi	26 MPa	D 638
Elongation			
@ Break (2 in/min)	>600%	>600%	D 638
Flexural Modulus ³	200,000 psi	1,380 MPa	D 790
Notched Izod Impact Strength	2.2 ft-lbf/in	117 J/m	D 256
Environmental Stress Crack Resistance (10%)	—	>500 hours	D1693-B
Environmental Stress Crack Resistance (100%)	—	>3000 hours	D1693-B
Molecular Weight Distribution	—	Bimodal	Ineos

¹ Typical properties will vary within specification limits.

² 190° C/2160 g

³ Tangent-Method

⁴ Values shown are typical as measured by an internally developed Ineos method.