

# CAP311US2 Polyethylene Copolymer

CAP311US2 is a High Density Polyethylene copolymer manufactured by INEOS Olefins & Polymers intended for the injection and compression molding of screw caps for still mineral water and lightly pressurized beverages. Developed for applications requiring excellent processability, high rigidity, enhanced stress cracking resistance and excellent organoleptic properties, CAP 311US2 is well suited for packaging in direct contact with beverages and sensitive food. CAP311US2 contains a slip package for lower cap removal torques and improved capping performance. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

## Typical Properties<sup>1</sup>

	Values		ASTM Method
	English Units	SI Units	
<b>Resin</b>			
<b>Density</b>	—	0.9600 g/cc	<b>D4883</b>
<b>Melt Index 190 C/2.16 kg</b>	—	3.8 g/10 min	<b>D1238</b>
<b>Compression Molded Sample</b>			
<b>Tensile Strength (2 in/min)</b>			<b>D638</b>
@ Yield	4,150psi	28.8 MPa	
<b>Elongation (2 in/min)</b>			<b>D638</b>
@ Break	>900%	>900%	
<b>Flexural Modulus</b>			
Tangent Method	224,650 psi	1,550 MPa	<b>D790</b>
<b>Notched Izod Impact Strength</b>	0.9 ft-lbf/in	4.5 kJ/m <sup>2</sup>	<b>D256</b>
<b>Environmental Stress Crack Resistance</b>			<b>D1693</b>
Condition B, 10% Igepal, F50 (hrs.)	21	21	
Condition B, 100% Igepal, F50 (hrs.)	62	62	
<b>Molecular Weight Distribution</b>	--	Bimodal	INEOS

<sup>1</sup> Properties will vary and are not to be used for specification purposes.

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**INEOS**  
Olefins & Polymers USA



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## Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, call + 1-800-527-5419.

## Health and Safety Information

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The Material Safety Data Sheet (MSDS) contains the available product health and safety information for this material and can be found at [www.ineos-op.com](http://www.ineos-op.com). Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by INEOS is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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