# **CAP311US Polyethylene Polymer**

CAP311US 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 311US is well suited for packaging in direct contact with beverages and sensitive food. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

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

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

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

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. As conditions of use may vary and are beyond the control of INEOS Olefins & Polymers USA, no representations or warranty, express or implied, are made with respect to the accuracy, reliability, or completeness of this information. This information in no way modifies, amends, enlarges, or creates any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED. INEOS Olefins & Polymers USA shall not be responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices, or from hazards inherent in the nature of the product and/or material designated and may not be valid for such product and/or material designated and may not be valid for such product and cor material descined in romation shall not be construed as a recommendation for any use that may infringe any patent, trademark, or the like, or as an endorsement of any material, equipment, service, or other item not supplied by INEOS Olefins & Polymers USA.

The name and logo INEOS are trademarks of the INEOS Group and its affiliated companies and businesses.

2600 South Shore Boulevard, Ste. 500 League City, TX 77573 Tel: 281-535-6600 www.ineos-op.com



## **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**. 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:

### INEOS Olefins & Polymers, USA

Marina View Building 2600 South Shore Boulevard Suite 500 League City, Texas 77573 Phone: +1 281 535 6600 Fax: +1 281 535 6764 Customer Service: +1 800 527 5419 Tech Service: +1 800 338 0489 www.ineos-op.com

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. As conditions of use may vary and are beyond the control of INEOS Olefins & Polymers USA, no representations or warranty, express or implied, are made with respect to the accuracy, reliability, or completeness of this information. This information in no way modifies, amends, enlarges, or creates any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED. INEOS Olefins & Polymers USA shall not be responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices, or from hazards inherent in the nature of the product and/or material designated and may not be valid for such product and/or material designated and may not be valid for such product and cor material descined in romation shall not be construed as a recommendation for any use that may infringe any patent, trademark, or the like, or as an endorsement of any material, equipment, service, or other item not supplied by INEOS Olefins & Polymers USA.

The name and logo INEOS are trademarks of the INEOS Group and its affiliated companies and businesses.

2600 South Shore Boulevard, Ste. 500 League City, TX 77573 Tel: 281-535-6600 www.incos-op.com

