

# CAP508US2 Polyethylene Copolymer

CAP508US2 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. CAP508US2 exhibits excellent stress crack resistance needed for the production of closures intended for packaging of carbonated drinks. CAP508US2 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 Properties<sup>1</sup>

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.953 g/cc	D 4883
Melt Index <sup>2</sup>	—	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 <sup>3</sup>	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

<sup>1</sup> Typical properties will vary within specification limits.

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 the 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, nor for toxicological effects or Industrial Hygiene associated with particular use of any product described herein. This information relates only to the specific product and/or material designated and may not be valid for such product and/or material used in combination with any other product and/or material or in any process, unless otherwise specified. This information 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 Ineos Olefins & Polymers USA and its logo are trademarks of Ineos USA LLC or its affiliated companies. June 2006 © 2006 Ineos Olefins & Polymers USA

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

**INEOS**  
Olefins & Polymers USA



# CAP508US2 Polyethylene Copolymer

<sup>2</sup> 190° C/2160 g

<sup>3</sup> Tangent-Method

<sup>4</sup> Values shown are typical as measured by an internally developed Ineos method.

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, nor for toxicological effects or Industrial Hygiene associated with particular use of any product described herein. This information relates only to the specific product and/or material designated and may not be valid for such product and/or material used in combination with any other product and/or material or in any process, unless otherwise specified. This information 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 Ineos Olefins & Polymers USA and its logo are trademarks of Ineos USA LLC or its affiliated companies. June 2006 © 2006 Ineos Olefins & Polymers USA

2600 South Shore Boulevard  
League City, TX 77573  
Tel: 281-535-6600  
[www.ineos-op.com](http://www.ineos-op.com)

**INEOS**  
**Olefins & Polymers USA**



# CAP508US2 Polyethylene Copolymer

## 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 O&P 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  
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](http://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, nor for toxicological effects or Industrial Hygiene associated with particular use of any product described herein. This information relates only to the specific product and/or material designated and may not be valid for such product and/or material used in combination with any other product and/or material or in any process, unless otherwise specified. This information 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 Ineos Olefins & Polymers USA and its logo are trademarks of Ineos USA LLC or its affiliated companies. June 2006 © 2006 Ineos Olefins & Polymers USA

2600 South Shore Boulevard  
League City, TX 77573  
Tel: 281-535-6600  
[www.ineos-op.com](http://www.ineos-op.com)

**INEOS**  
**Olefins & Polymers USA**