



New Performance Solutions for RIGID CONTAINERS

TOPAS® Cyclic Olefin Copolymer (COC)

*Performance additive for ISBM of strong, lightweight HDPE bottles at high speed
Move beyond the limitations of EBM*

Advantages of HDPE Reheat Injection Stretch Blow Molding vs. EBM:

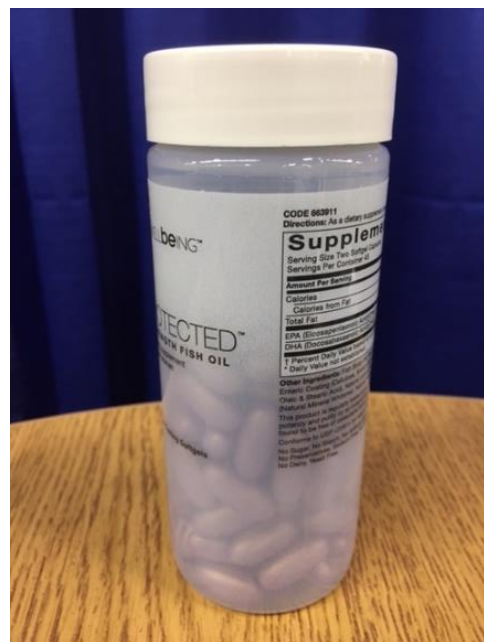
- Light Weight
 - Reduce container weight by 20 to 40 percent
- Enhanced Aesthetics
 - Lower haze
 - Higher gloss
- Reduced Waste
 - Eliminate flash trim

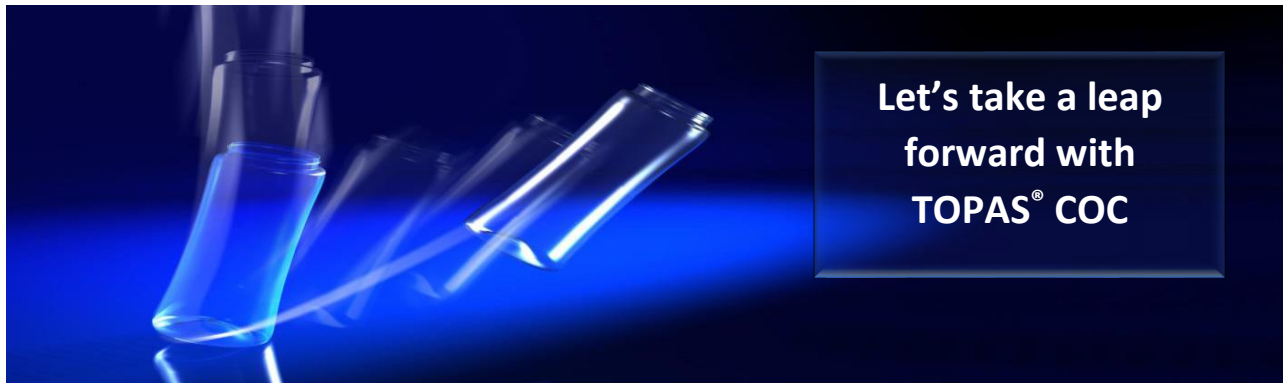
Added Benefits COC Brings to HDPE Reheat Stretch Blow Molding:

- Enable Strain Hardening
 - Broadens stretching temperature process window > 10°C
 - Substantial increase to productivity & yield
- Improve Container Durability
 - Higher stiffness
 - Higher top load
 - Higher drop impact resistance
 - Higher heat resistance

Solve Challenging Problems & Create New ISBM Market Opportunities:

- Single & Two-Step Processes
 - Monolayer
 - HDPE-COC blend
 - Co-injection Multilayer
 - COC-HDPE-COC





TOPAS Advanced Polymers is the world’s leading maker of cyclic olefin copolymer (COC), a glass-clear and extremely pure plastic for packaging, healthcare, optics, and electronics applications. From insulin delivery to food contact films, to tablet and smartphone displays, TOPAS COC is the high-performance material of choice. Broad global regulatory compliance of TOPAS COC can make your next development a simpler task.

TOPAS Advanced Polymers is a joint venture of Polyplastics Co., Ltd., and Daicel Corporation. The company is headquartered in Frankfurt, Germany, with a U.S. subsidiary in Florence, Kentucky.

CONTACT US		
North America TOPAS Advanced Polymers, Inc. 7300 Turfway Road Florence, KY 41042 T +1 859 746 6447 info@topas-us.com www.topas.com	South America and Europe TOPAS Advanced Polymers GmbH Paulistrasse 3 65929 Frankfurt, Germany T +49 1805 1 86727 info@topas.com www.topas.com	Asia Polyplastics Co., Ltd. R Shinagawa East Building, 13F 18-1 Konan 2 - Chome, Minato-Ku Tokyo, 108-8280, Japan T +81 3 6711 8615 topas.info@polyplastics.com www.polyplastics.com

Notice to Users: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colorants or other additives may cause significant variations in data values. - Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones which exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique, or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. - We strongly recommend that users seek and adhere to the manufacturer’s current instructions for handling each material they use, and to entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Safety Data Sheets before attempting to process our products.