

CASE STUDY - THERMOPLASTICS

A faster, more effective solution for color changeovers.

35%

DECREASE IN MATERIAL COST



52%

REDUCTION IN DOWNTIME



WHAT WE ACHIEVED.

Purging blow molding machines can be a very time-consuming and expensive process for many processors. Due to the design of blow molders, in particular the head or accumulator, it can be difficult to avoid color streaking when transitioning from a dark color into a lighter color.

A blow molded bottle manufacturer recently reached out to Chem-Trend for assistance with their color changeover challenges. We worked with the customer to test and select the ideal purging compound — resulting in a 52% reduction in downtime and 35% reduction in material cost.

HOW WE GOT THERE.

During color changeovers, the molder was consistently experiencing issues with dark color streaking down the side of the bottles, lasting sometimes up to 4 hours. The blow molder had tested mechanical purge compounds in the past, but was unable to find a product that was cost-effective. Thus, their alternative method for purging the machine was to run virgin HDPE after the dark color.

After carefully assessing the customer's challenges, the Chem-Trend team recommended the Ultra Purge™ 5150 to the blow molder. The Ultra Purge 5150 is a hybrid purge compound that combines the benefits of chemical and mechanical purging properties to increase the efficiency in cleaning the screw and accumulators/heads. The Ultra Purge 5150 has proven to be a superior alternative to conventional purge compounds.

OUR SOLUTION.

With the Ultra Purge™ account manager present, a trial was conducted utilizing the Ultra Purge™ 5150. Using the Ultra Purge™ 5150, the customer was able to significantly reduce downtime by 52% and material costs by 35%. The total savings for the color change was \$243.90.

Today, the blow molder is using Ultra Purge for all of their dark-to-light color changeovers, as well as machine shutdowns and startups.



HANDPRINT IMPACT

At Chem-Trend, we pride ourselves on our long history of sustainability efforts. However, it is our effect on our customers' processes that provides the greatest impact. It goes beyond our global Footprint; it is our even wider Handprint.

Here, we achieved the following:

- Reduction of energy usage due to more efficient production
- Reduction of scrap by producing more usable product and reducing the need for recycling