

## CASE STUDY - THERMOPLASTICS

# A purging solution provides remarkable reductions in time, waste, and frustration.

**85%**  
REDUCTION IN SCRAP  
IN DARK TO LIGHT  
COLOR CHANGES



**87%**  
COST SAVINGS USING  
ULTRA PURGE™  
VS. CURRENT IN-  
HOUSE PURGE  
(WHEN GOING FROM  
GREEN TO WHITE)



**>69%**  
REDUCTION IN  
DOWNTIME FROM  
CLEANING MACHINE  
LINES AND BLENDERS



### WHAT WE ACHIEVED.

When a global plastics packaging manufacturer needed to significantly reduce their scrap rate, Chem-Trend provided a transformative solution. The challenge? Incomplete color change — residual particles were consistently remaining in the barrel and head of their extrusion blow molding equipment, leading to color contamination issues, unusable product, and excessive scrap. The subsequent repeated cleanings also led to a frustrating amount of downtime. With Ultra Purge™ 3615, a ready-to-use, self-emptying purging compound made of high-quality thermoplastic polymers, the manufacturer was able to eliminate these costly issues, achieving an 85% reduction in scrap and 69% reduction in downtime for machine cleaning.

### HOW WE GOT THERE.

The search for the right purging compound was a long, frustrating process for the manufacturer. Despite trying several on the market, the manufacturer couldn't find a product that sufficiently reduced scrap to the level they required. They even turned to making their own liquid purge blend, which also failed to yield desired results. Partnering with Chem-Trend marked a turning

point. Equipped with Chem-Trend product samples and dedicated technical support, together a test was implemented for Ultra Purge™ during a notoriously difficult green-to-white color change as well as at startup and shutdown. The improvement was clear: Removing all residue, Chem-Trend's purging compound allowed for quick cleanup and packaging produced without any color contamination.

### OUR SOLUTION.

Introducing Ultra Purge™ 3615 to its blow molding plant facility, the manufacturer was able to produce a high-quality product while achieving an extreme reduction in scrap. While light-to-dark color changes were routinely generating between 400 to 800 kgs of scrap when processing high-density polyethylene (HDPE), with Ultra Purge™ 3615, scrap weighed in at the remarkably lower 100 kgs. Effective at removing color from barrels and heads, the purging product's self-emptying technology quickly eliminated color and residue. This has significant benefits for the entire operation in terms of product quality, uptime, and overall waste reduction. The manufacturer is eager to extend the Ultra Purge™ 3615 technology to their other facilities and regions.



### 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:

- Reduced scrap and material waste due to complete color change.
- Less energy waste due to quicker cleaning and less downtime.

For more information about our thermoplastics capabilities, our innovations, or other stories, visit [CHEMTREND.COM](http://CHEMTREND.COM)

