

# Additives Solve Breakage Problem for Soap and Detergent Maker

Reduced Costs and Manufacturing Time



**A**s consumer products companies look to maximize profits in today's uber-competitive environment, every manufacturing inefficiency must be identified and corrected to keep vital market share. A leading manufacturer of well-known laundry and household care products was challenged with an ongoing and costly cap breakage issue for its containers and needed help to solve the problem. The company's current polypropylene cap material along with a particularly long conveyance within the plant to the bottling line combined to produce an unacceptable 30% scrap rate.

Nexeo Plastics proposed a polyolefin elastomer additive from a top supplier to toughen the end product and increase durability. We sent samples to the customer and worked with its engineering staff to test varying percentages of the additive to eliminate the breakage, ultimately landing on the ideal percentage of additive use to achieve a 0% failure rate. Once we determined the optimal mix to eliminate the cap failure, we provided additional support to help the customer ensure cycle times were maintained after the change in the formula.

Nexeo Plastics delivered a solution-focused approach that eliminated the customer's breakage problem altogether. We also worked closely with the supplier and third-party molders to ensure a successful outcome and to meet the customer's challenging documentation requirements. Because the third-party molders were direct customers of the supplier, the supplier also agreed to transition those customers to Nexeo Plastics to service their additive needs.

**Discover how Nexeo Plastics can help you overcome your material, process, and application challenges.**

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## PROJECT AT-A-GLANCE

### Recorded Benefits

- Reduced cap breakage rate from 30% to zero
- Incurred no loss in production rates, which additives can sometimes cause
- Fulfilled customer's challenging regulatory documentation requirement

### Challenge

A soap and detergent maker needed to solve a costly breakage problem on its capping line.

### Solution

Nexeo Plastics proposed an additive to act as a toughening agent and to mitigate breakage. We then worked with the customer to determine the exact amount of additive to reduce the breakage rate to zero.

### Result

The increased durability of the end product eliminated the cap failures.



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