



Case Study

Kroger Leads the Way in Shopping Cart Safety with Fusion Labels

Kroger® partners with Polyfuzer® to increase safety through improved shopping cart child seat flap labeling.



Fry's shopping cart (after 10 years in the field)

Executive Summary

Kroger, in collaboration with Polyfuzer, responded proactively to revised ASTM safety standards and tragic incidents by implementing new warning labels on shopping carts, specifically addressing risks with personal infant carriers while setting a new bench mark for grocery chains.

Background

In 2011, a tragic incident where an infant was fatally injured due to their carrier falling from a shopping cart prompted ASTM to revise its standards in 2012. The grocery industry, confronting over 20,000 annual child injuries related to shopping carts, recognized the urgent need for compliance with these enhanced safety measures. Kroger, acknowledging the importance of this issue and the 4-10 year average lifespan of shopping carts, was among the first to adopt these new standards, focusing on durable labeling to meet ASTM Standard F2372's requirements for permanent warnings.

Problem Statement

Kroger's challenge with fading shopping cart labels posed a significant "Failure to Warn" legal risk. The hot stamp foil labels used were prone to fading due to the plastics' low surface energy, which resists adhesion. This issue was exacerbated by outdoor storage and further aggravated by abrasion from children using the seats. The fading of these labels not only failed to meet safety standards but also attracted attention from the Consumer Product Safety Commission in 2011, necessitating a shift to more durable, multicolor, and permanent labeling to effectively communicate safety information and adhere to industry standards.

Solution

Polyfuzer's Polymer Fusion Labeling Technology offered a revolutionary approach. Unlike traditional methods, it fused to the plastic seat flap at a molecular level, ensuring long-lasting safety information. This technology offered permanent, visible safety warnings, meeting ASTM's emphasis on safety colors, label durability, and legibility.

Implementation

Kroger, utilizing their Tier 1 flap molding partner Unarco Industries, implemented the new safety measures across their shopping cart fleet. This strategic collaboration focused on enhancing safety, ensuring ASTM compliance, and reducing "Failure to Warn" liabilities.

Results

The initiative, executed in partnership with Unarco Industries, led Kroger to not only meet, but exceed the ASTM F2372 standards. This was achieved through the adoption of multi-color warning labeling, replacing the traditional single-color approach. More importantly, the labels were designed to remain fused for the life of the shopping cart flap, fully aligning with the standard's intent for long-term safety compliance.

Analysis

While Kroger took a leading role in this safety initiative, it's important to note that the ASTM standard is voluntary. Several other grocery chains and Tier 1 molders have yet to adopt the change, continuing to use shopping cart flaps with non-durable hot stamp foil labels. The reluctance of some to update their labeling practices not only compromises customer safety but also leaves them vulnerable to potential legal repercussions. The ineffectiveness of hot stamp foil labeling, highlighted in the Consumer Product Safety Commission's 2011 study, underscores the need for more durable and permanent solutions.

Conclusion

Kroger's approach, vital for grocery chains, demonstrates a commitment to safety, legal compliance, and industry leadership, influencing broader retail practices



The Problem: Traditional Methods



The Solution: Polymer Fusion Labeling