

# Barrier Closures with In-Mold Labeling



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## R&D partners

Universal Closures Ltd

## Background

Universal Closures are the proprietor of patented closure sealing technology. The company provides closure manufacturing and marketing licenses suitable for beverage, food and personal care products.

## Types of products

Barrier closure with in-mold labeling. Based on a three-component design – closure shell, barrier liner and closure liner – the barrier liner is made from Plantic®. The Plantic® barrier liner is sandwiched between the closure liner and the closure shell, thereby providing enhanced gas barrier protection to the contents, and effective in-mold decoration.

## Technical challenges

Meeting the key requirements:

- Excellent gas barrier performance
- Efficient in-mold decoration

## Why Plantic®?

In addition to barrier performance and efficient in-mold decoration, Plantic® offers the following unique properties:

- High resolution printable
- Water dispersible and biodegradable in water
- Efficient performance in established recovery systems
- Excellent taint and odor barriers
- Anti-static, sealable and laser etchable

## Status

Market testing is under way.

## Potential market/benefits

Target market: carbonated drinks, beer, aseptic packaging. The market requests shelf-life extension through innovative packaging solutions.

Plantic® barrier liners facilitate CO<sub>2</sub> retention and oxygen ingress, necessary for the increased shelf-life of products. They are a cost-effective and environmentally friendly alternative to established barrier liners.

Managing Director of Universal Closures Ltd, Mr. Rod Druitt, said that these new barrier closures “present an innovative offering to global food and beverage industries that is differentiated from current barrier closure systems.”

