StePac PPC

PATENT PENDING

PAZ STAND-UP POUCH

The First Modified Atmosphere Pouch that Controls Excess Moisture

Overview

The PAZ Stand-up Pouch represents a groundbreaking innovation in fresh produce packaging, leveraging advanced flexible film technology to revolutionize moisture and atmosphere control in reclosable stand-up pouches for fresh produce.

Designed to address critical challenges in the supply chain, this **patent-pending** solution offers a unique three-in-one approach in a resealable stand-up pouch: modified atmosphere (MA), **modified humidity (MH), and condensation control.**

By utilizing a scientifically engineered film with superior Water Vapor Transmission Rates (WVTR), the pouch effectively removes excess moisture, reduces risk of microbial decay, and maintains product clarity. The packaging solution is particularly suitable for items that are sensitive to excess moisture, including cucumbers, green beans sliced mushrooms, preserving quality, extending shelf life and minimizing waste by a combination of modified atmosphere and moisture control.

The pouch is also available with a zipper to enable reclosability and each time that the pouch is reclosed, it will continue to preserve the quality of the produce within.

Breakthrough Moisture Control

3-IN-1

Advanced Vapor Control

Scientifically engineered film with superior Water Vapor Transmission Rates (WVTR) enables precise moisture management.

Excellent Moisture Management

Reducing microbial decay risk by minimizing condensation inside the bag. The excess humidity is released through the specialized film.

Crystal Clear Presentation

A crystal-clear packaging solution that preserves produce appearance and maintains freshness throughout the supply chain.

Driving the Future of Shelf-life Extension Packaging for Fresh Produce

PAZ STAND-UP POUCH FOR CUCUMBERS EXCELLENT MOISTURE REGULATION

The Challenge

Cucumbers are highly susceptible to excess moisture, which can accelerate microbial decay. To address this, the packaging is often macro-perforated to release excess moisture. While macro-perforations help prevent moisture buildup, it accelerates dehydration and does not have shelf-life extension properties.

Incorporating modified atmosphere (MA) properties into the laminated pouches can help prolong shelf life. However, this approach may lead to moisture accumulation, especially under temperature fluctuations, exacerbating the issues of decay and russeting.

The Solution - StePacPPC's Xgo™ PAZ Stand-up Pouch with:

- ✓ High Water Vapor Transmission Rate (WVTR) film
- ✓ Advanced moisture control technology
- ✓ Modified atmosphere properties
- ✓ Resealable zipper that regenerates the protective environment inside the close pouch
- ✓ Excellent antifog properties

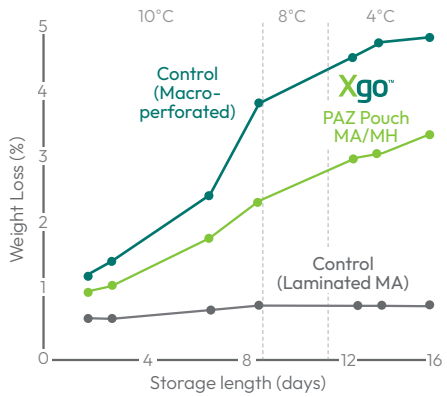
THE RESULTS

The high quality of cucumbers was well preserved under supply chain conditions that simulate shipment from Mexico to USA.

Xgo™ PAZ Pouch facilitates the use of MA, better preserving quality and **reducing risk of microbial decay** in comparison to the laminated pouch with low WVTR and MA properties and better preserving quality, **reducing dehydration** and **microbial decay** in comparison with the laminated pouch with macro-perforations.

	Overall Quality (1-4)[a]	Mocrobial Decay (%)	Shriveling (1-4)[b]	Pitting	Yellowing (*b)[c]	Firmness (mLb)
Xgo™ PAZ Pouch MA/MH	3.0	0.0	2.8	✗	24.3	4035
Control (Macro-perforated)	2.1	4.4	2.3	✓	24.6	4011
Control (Laminated MA)	2.8	5.0	2.7	✓	26.8	4185

a 1-inedible, 2-unsaleable, 3-saleable, 4-excellent **b** 1-severe, 2-moderate, 3-slight, 4-none **c** Hunter b* scale: Higher values are more yellow



- Extended shelf life
- Reduced risk of microbial decay
- Slows down yellowing and softening
- Less dehydration, & shriveling
- Reduced weight loss

All products are available for a range of weights in customizable sizes

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