



# MODIFIED ATMOSPHERE IN FIBC'S



# Modified Atmosphere in FIBC's

As a leading developer in high-end packaging solutions, we are continuously working towards better ways to pack and protect products. We are taking our packing possibilities to the next level by introducing Modified Atmosphere for FIBC's, our new packaging concept. Read all about how Modified Atmosphere in FIBC's adds to excellent and sustainable supply chain management.



## What is Modified Atmosphere?

To pack and protect the most delicate of products, it is the inside that counts: the levels of oxygen and other components can strongly affect the quality and state of the product inside. Product quality can be optimized using the right amounts of oxygen and nitrogen. Modified Atmosphere creates this new way of preserving products

in Industrial packaging. The Sensor Spot technology enables us to analyze and control oxygen and nitrogen levels inside FIBC's in a non-invasive way. With this combination of technologies Masterpack has created a way of packaging that minimizes food waste by preserving quality and offering a longer shelf life.



## The technology

Modified Atmosphere technology can be applied to adjust oxygen levels within the packaging to the desired range. It enables us to adjust the composition of the air inside the package. This makes it possible to control and monitor the decay- and oxidation process in a precise way in order to improve the supply chain management and shelf life.

Thanks to the non-invasive Sensor Spot technology, using a fluorescence signal to measure

inside the packaging, no openings whatsoever have to be made inside the packaging material, preserving the quality inside and protecting it from contamination risks from the outside. These measurements can be repeated as often as needed without destructing the packaging in any way. In addition, all our bulk packaging is produced in Class 10000 Clean-rooms, further minimizing risks of contamination and pests.

## The benefits



**Shelf life  
extension**



**Quality  
preservation**



**Contamination  
control**

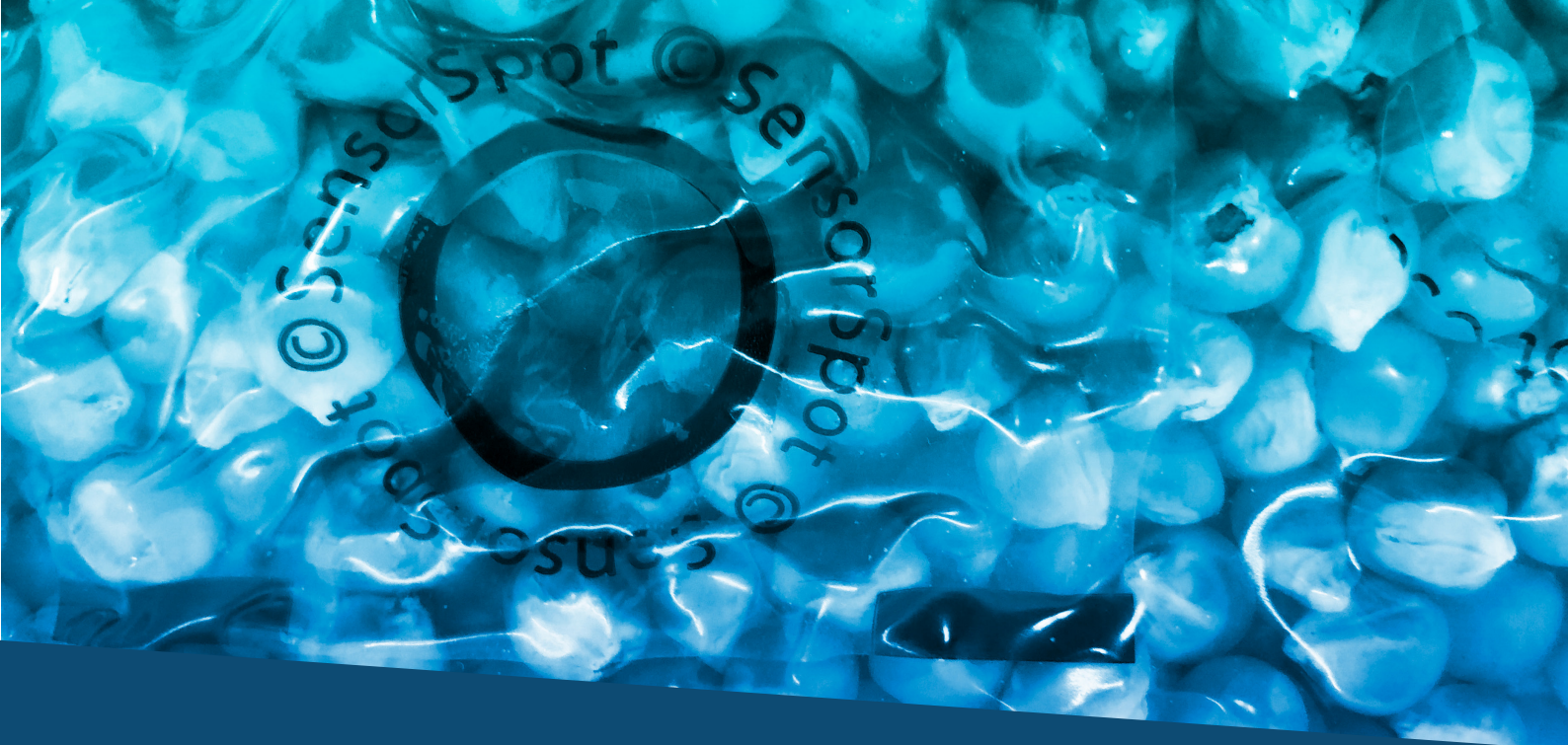


**Pests  
prevention**



**Reduces  
food waste**





## The benefits

Modified Atmosphere allows us to create a packaging environment in which products can be stored longer, without losing their quality. With customized oxygen and nitrogen levels within our FIBC's, none of the colour or taste of food products goes to waste. Modified Atmosphere can also be used as a way of natural fumigation, using Low Oxygen or carbon dioxide to protect (organic) produced food from insects.

Leaving the packaging intact using the non-destructive Sensor Spot technology, products are protected from external factors, and from pests and contamination. By producing all of our FIBC's in Clean Rooms, we further minimize these risks.

Combining the benefits of Modified Atmosphere and Sensor Spot technology, not only shelf life, but also overall sustainability in the supply chain is improved, by minimizing and preventing food waste.

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## Usage possibilities

Our Modified Atmosphere and Sensor Spot technology can be applied for various products, such as:



Dried foods



(Dairy) powders



Seeds



Refined products

## Taking the lead

With nearly 100 years of experience and knowledge in the packaging industry, Masterpack is a leading developer in high-end packaging solutions. We're taking the lead with continuous improvement and new innovations. Masterpack has its own Technology Center based in Europe in which we perform research and customer specific testing. We work together with universities to release available knowledge and research.

Learn more on

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