

JOIN OUR UMBRELLA.

PROTECTING YOUR PRODUCT & CARGO IS OUR PRIORITY



Starsage Packaging



Adhesive Tapes



Air Bubble Wrap



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Dunnage Air Bags



Ethylene Absorbers



Oxygen Absorbers



Plastic Pallets



Steel Pallets



Biodegradable Bags

Oxygen Absorbers

Oxygen scavengers Of oxygen absorbers are added to enclosed packaging to help remove or decrease the level of oxygen in the package. They are used to help maintain product safe, and extend shelf life.

There are many types of oxygen absorbers available to cover a wide array of applications. The components of an oxygen absorber vary according to intended use, the water activity of the product being preserved, and other factors.

HOW IT WORKS?

- Nuts, cut fruits, grains etc breathe in an air tight system.
- They absorb Oxygen in this process and reach their expiry faster.
- KIF O₂ absorbers control the respiration rate by scavenging the oxygen in the package.
- If lower oxygen and prevent myco and aflatoxins development and chemical oxidation.
- The hermetic condition is maintained in the packaging.



How Oxygen Absorbers Work:

When an oxygen absorber is removed from its protective packaging, the moisture in the surrounding atmosphere begins to mingle with the iron particles inside of the Oxygen Absorber sachet. As the oxygen molecules from the moisture interact with the iron (Fe) particles, rust begins to develop. Typically, there must be at least 65% relative humidity in the surrounding atmosphere before the rusting process can begin. To remedy this dilemma, sodium is added to the mixture. The sodium acts as a catalyst, or activator, causing the iron powder to rust even with low relative humidity. With the conversion of iron and oxygen into a single iron oxide substance, the presence of oxygen in the surrounding atmosphere is dramatically reduced.

The performance of oxygen absorbers is affected by the ambient temperature and relative humidity. Activated Carbon (C), also called activated charcoal or activated coal, is a highly porous substance that allows gases to pass through and interact with the exposed carbon. As the gases interact with the carbon, most impurities and contaminants are adsorbed and neutralized. As a result, the presence of undesirable odors is greatly reduced.

Why Do I Need Oxygen Absorbers?

When packaged properly (i.e., an appropriately sized oxygen absorber inside of a high oxygen barrier can or bag), the oxygen level in the surrounding atmosphere is effectively reduced to approximately 0.01%. Therefore, oxygen absorbers extend the shelf life of your food, prevent oxidation and insect damage.

More than any other atmospheric element, oxygen supports the growth of aerobic microorganisms such as fungi and mold. With the growth of these microorganisms, the integrity of a package is drastically compromised. In food products, discoloration takes place, rancidity and putrefaction set in, and the possibility of food poisoning is ever present. With historical documents, art and other artifacts, the presence of oxygen contributes to rapid deterioration, mildew, mold and a wide array of other contaminants. Oxygen Absorbers were designed to protect against such problems.

Benefits of Oxygen Absorbers:

- Helps retain fresh-roasted flavor of coffee and nuts
- Prevents oxidation of spice oleoresins present in spices themselves and in seasoned foods
- Prevents oxidation of vitamins A, C and E
- Extends life of pharmaceuticals
- Inhibits mold in natural cheeses and other fermented dairy products
- Delays non-enzymatic browning of fruits and some vegetables
- Inhibits oxidation and condensation of red pigment of most berries and sauces
- Oxygen deprivation contributes to a pest-free environment in museums

Typical Applications:

- Breads, cookies, cakes, pastries
- Nuts and snacks
- Candies and confectioneries
- Coffee and tea
- Whole fat dry foods
- Processed, smoked and cured meats Cheeses and dairy products
- Dried fruits and vegetable
- Spices and seasonings
- Flour and grain items
- Fresh and precooked pasta and noodles

Reasons to Get Oxygen Absorbers from IMPAK:

- **Quality:** Every single production run is put through a series of tests to ensure the Oxygen Absorbers can successfully perform their job. Stock is routinely rotated to ensure that our Oxygen Absorbers are sold in a timely manner.
- **Price:** The ability to produce high volume production runs allows us to be flexible in our pricing. Substantially discounted pricing is available for larger orders.
- **Availability & Selection:** IMPAK maintains a regularly stocked supply of all sized Oxygen Absorbers. Whether you need a single pack of 100cc Oxygen Absorbers, or 50 full cases of 2000cc Oxygen Absorbers, we have them on hand.
- **Technical Support:** Realizing how important your product storage and preservation is, IMPAK has in-house technical staff to assist you.



Baby Food



Bakery Food



Noodles



Beef Jerky



Beverages



Cheese



Coffee



Cookies



Dairy Products



Diagnostic Kits Packaging



World of

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