Oxygen Absorber & Desiccant System

Cat. No.: ISO-A-25AZS

Product Overview

The ISO **Oxygen-Free & Dry Storage System A-25AZS** is a system designed to create and maintain a highly oxygen-free and low-humidity environment for storage using:

- A high-barrier special storage bag with **extremely low oxygen and moisture permeability**,
- A **high-speed type oxygen absorber (A-750HS)**, and
- A powerful **synthetic zeolite plate desiccant**.

By using **two layers of storage bags**, oxygen that might infiltrate due to deterioration of the oxygen absorber is prevented, allowing a **precise oxygen-free and dry environment to be maintained for a long period**.

Features

• The combination of an oxygen absorber and synthetic zeolite desiccant makes it easy to create an **oxygen-free + dry atmosphere**.

• Using two layers of special storage bags keeps oxygen and moisture out and **maintains a stable oxygen-free, dry atmosphere for an extended time**.

• An **oxygen indicator** is included, so the presence of oxygen can be seen at a glance.

• The **AZ-10G synthetic zeolite desiccant** also adsorbs corrosive gases such as H_2S and SO_2.

• All chemical agents are individually packaged in aluminum laminate bags.

• **Initial air volume:** less than 500 mL.

• Using a heat-seal machine makes the process even easier.

System Description

For preventing oxidation of precision parts, electronic parts, metals, etc., a common method is to use an oxygen absorber and desiccant together inside a gas-barrier storage material. However, combined use can reduce the oxygen absorber's effectiveness because the desiccant removes moisture the absorber needs to work, and tiny amounts of oxygen can still diffuse through the bag film.

To solve this, the A-25AZS system uses **two layers of storage bags with extremely low oxygen and moisture permeability**. This prevents oxygen influx and makes it easy to create a highly accurate oxygen-free, dry environment. The outer bag is transparent, so contents are visible. By replacing the oxygen absorber placed between the inner and outer bags, the oxygen-free, dry environment can be sustained for an extended period.

Performance

- **Oxygen concentration** and **humidity** both reach nearly zero.
- Approximately **15 hours** to reach oxygen concentration near zero.
- Approximately **48 hours** to reach near zero humidity.

Components of the A-25AZS System (for 25 packages)

The set includes the following components:

- **A-750HS Oxygen Absorber (with oxygen indicator)** × 50
- **AZ-10G Synthetic Zeolite Plate Desiccant** × 25
- **AP-1522 High-Barrier Special Storage Bags (15×22 cm)** × 25
- **AP-1826 High-Barrier Special Storage Bags (18×26 cm)** × 25
- **CL-15 Sealing Clips (15 cm)** × 2
- **CL-21 Sealing Clips (21 cm)** × 2
- All agents are individually packaged in **aluminum laminate bags**.

Basic Usage

1. Place the item to be stored into the **AP-1522 inner special storage bag**.
2. Open the aluminum pouch of the oxygen absorber, oxygen indicator, and zeolite desiccant, and place them inside the inner storage bag with the item (do not overlap the agents).
3. Seal the inner storage bag using the CL-15 sealing clip or a heat-seal machine.
4. Place a new oxygen absorber and oxygen indicator together with the sealed inner bag into the **AP-1826 outer bag**, then seal with the CL-21 sealing clip or heat-seal machine.

Notes & Precautions

- Work quickly when sealing the bags.
- If you don't want the desiccant/absorber to touch the contents directly, you can place those contents in a breathable container (e.g., a petri dish) before sealing.
- Do not block the air-permeable surface of the oxygen absorber or desiccant.
- Avoid direct sunlight or fluorescent lighting when storing sealed bags (oxygen indicator may fail to show color changes otherwise).
- If the oxygen absorber deteriorates (indicated by color change of the oxygen indicator), open the outer bag and replace the absorber.

Ideal Applications

This system is suitable for long-term oxygen-free, dry storage of:

- Precision parts
- Electronic components
- Various metal materials
- Pharmaceuticals and other chemicals