

Moisture damage

For many years, thousands of containerized cargoes are damaged by moisture problems. When the containers arrive in the destination, metal is found to be rusty or oxidated, cartons become soft and moldy, bulk coffee, cocoa, beans may be damp, musty..., such loss sometimes costs several million dollars. It is caused by two main reasons: **Cargo Sweat** and **Container Rain**.



Container moisture solution

TOP-SORB focus on the supply of desiccant products and moisture-proof packaging system solutions and professional services, protect your valuable goods from humidity damage. For containerized cargo damp problems, we provide a solution, **TOP-SORB** series container desiccants, which create a dry environment in the container. It can effectively adsorb humidity, and control "dew point" temperature below the actual temperature, and thus prevent mildew, rust formation.

According to the test results of authoritative international organizations, **Dry Insert, Dry Dragon, Dry Guard, Dry Cover** keep absorbing moisture for 60 days, absorption capacity up to 250%, continuously reduce the relative humidity and protect the goods in the whole period of shipment.



Dry Insert-1000
(Hard Shell)



Dry Dragon-1000
(Double Package)



Dry Guard-500
(Double Package)



Dry Cover-1000
(Blanket Design)

Dry Insert-1000, absorbent weight: 1000g, hard shell design, nice looking and shape, improve the users' brands.

Dry Dragon-1000, absorbent weight: 1000g, double package, laminated non-woven, with hook.

Dry Guard-500, absorbent weight: 500g, double package, laminated non-woven, with hook.

Dry Cover-1000, absorbent weight: 1000g, blanket design, with ropes optional, in thickness within 15mm, suitable for the bulk goods like grains, agriculture products, can cover the goods like a blanket.

Dry Paste-125, absorbent weight: 125g, Dupont Tyvek packaged, the back side is with adhesive function. Without adhesive is available. Due to its small size and flat shape, it has very flexible application, it can be placed or pasted onto or under the pallets, into or onto the cartons, onto the container wall.



Dry Paste-125

■ Super adsorption & anti-leakage

Dry Insert, Dry Dragon, Dry Guard, Dry Cover, Dry Paste use the mixture of CaCl₂ and high water adsorption material as absorbent. Its adsorption capacity reaches over 250% at 25 °C ,90%RH. More importantly, this special mixture material **turns into solid gel after full adsorption**. There is **no any leakage** even it gets saturated. It is a perfect combination of super adsorption capacity and anti-leakage performance.



Before Adsorption

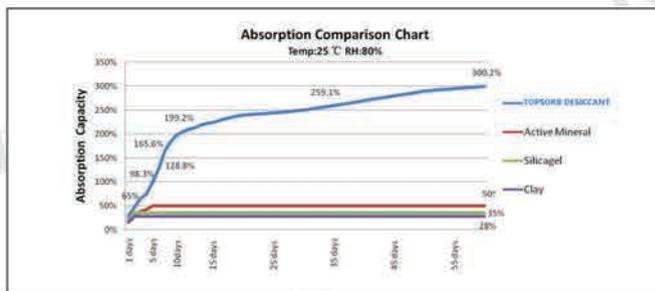


After Adsorption

■ Adsorption capacity at different RH

Relative Humidity	20%RH	30%RH	40%RH	50%RH	60%RH	70%RH	80%RH	90%RH
Adsorption	≥25%	≥50%	≥70%	≥90%	≥120%	≥160%	≥200%	≥250%

■ Adsorption chart



■ Comparison Pictures

Before using

After using



■ Applications

Widely used in various fields, including:
Semiconductor and electronic products, metal products,
Military products, precision instruments, machinery equipment,
Chemical materials, medicine, health care products,
Food packaging, canned food,
Pet food, textiles, furniture, leather products,
Bulk grains, agricultural products,
Transport of goods, warehousing.....

■ Application Pictures



Perfect Designs to Suit the Container Grooves



Dry Insert, Dry Dragon-1000, Dry Guard-500 can be fitted into the container