DEMAND <u>BETTER</u> MOISTURE PROTECTION FOR YOUR CARGO!





Superior Moisture Control Technologies For Both Dry And Moist Containerized Cargo.







DON'T ACCEPT CARGO SPOILAGE AS A COST OF DOING BUSINESS!

Now you can reduce cargo spoilage and the cost of moisture control. Without the need to ship products in expensive reefer or vented containers. Or use as much costly packaging (VCI paper, plastic wraps or tectyl coating) to protect cargo from moisture damage. Instead, less costly standard dry box containers can be equipped with advanced moisture control absorbers from Buffers to protect against every kind of moisture-related damage.

ADVANCED MOISTURE CONTROL FOR BOTH MOIST AND DRY CARGO.

Buffers offers proven solutions to create damage-free environments in both 20-ft to 40-ft containers. Solutions to protect every type of cargo-from steel and aluminum coils, machinery and all kinds of consumer goods, to moisture-containing cargoes of paper, wood products and agricultural commodities such as hay, coffee, cocoa, peanuts, beans and sugar.

A SINGLE SOURCE FOR PROVEN MOISTURE CONTROL PRODUCTS FOR BOTH CONTAINERS AND PACKAGING.

Buffers offers a complete line of moisture absorption products for containers (ABSORPOLE®, ABSORBAG®, ABSORTOP® and ABSORLINER®) as well as environmentally friendly $E\text{-}SORB^{\text{TM}}$ desiccants for moisture protection inside your packaging.

ALWAYS IN-STOCK INVENTORY TO MEET YOUR DEMANDING SHIPPING SCHEDULES.

We maintain fully stocked inventories of moisture control products on both coasts--insuring shippers will always have a reliable, on-time supply when and where they need it. Once our products become part of your engineer's shipment specifications, you can depend on us.



RESPONSIVE CUSTOMER SERVICE AND IN-DEPTH PRODUCT KNOWLEDGE.

Our staff is always ready to respond. Whether you need fast action on processing a rush order or expert recommendations for the moisture control technologies that will work best for your specific needs.



INVESTING IN BETTER MOISTURE CONTROL TECHNOLOGY WILL SIGNIFICANTLY REDUCE YOUR SPOILAGE COSTS.

LIMITATIONS OF CURRENT MOISTURE PROTECTION

Your cargo and its packaging, including container floors, pallets, cardboard and crates, contain moisture that is evaporated into the container during transport—adding moisture to what in most cases is already humid air. All existing pouch-type desiccants (silica gel, clay, and starch with calcium chloride) provide only limited protection due to their very basic and unsophisticated design.

Due to the pouch design, the desiccant is immediately overexposed and the protection for cargo quickly declines early in a voyage. The daily temperature fluctuations always cause a re-release (re-evaporation) of absorbed moisture back into the container. At high levels of humidity, the pouch type desiccant also easily becomes over-saturated and usually leaks. The result: only marginally better moisture protection inside the container during even a short voyage.



Due to the design of the pouch-type desiccants, they always release absorbed moisture back into the container on a daily cycle



When the desiccant is needed the most-at high humidity levels-the pouch type easily gets over-saturated and stops absorbing. Once they become over-saturated, leakage also usually occurs.

BUFFERS SOLUTION FOR BETTER MOISTURE CONTROL

Superior Technology

- Patented technology in ABSORPOLE®, ABSORBAG® and ABSORTOP® creates a damage-free environment within the shipping container—during an entire intermodal journey at sea, on land and over rail.
- Absorbing action is based on the proven ability of Calcium Chloride to aggressively remove moisture from the air--even when the humidity is low.
- Provides wider safety margins to protect cargo during both short and long voyages under a broader range of conditions thereby avoiding over-saturation that can cause damaging "container rain".
- Unlike other moisture control products, which release moisture back into the air, Buffers products are designed with collectors that effectively prevent re-evaporation.



- 1.Calcium chloride behind absorption grids aggressively removes moisture from the air.
- 2. Moisture turns into brine and is permanently trapped in plastic collectors during the entire voyage—preventing re-evaporation.

SUPERIOR CONTAINER MOISTURE CONTROL TECHNOLOGIES FROM AN INDUSTRY INNOVATOR.

ABSORPOLE®

- For any type of crated cargo or tightly stuffed containers.
- Most effective with 15" — 20" (400 — 500 mm) free space between ceiling and cargo.
- Collector is impactresistant for added protection in event of shifting cargo.



ABSORTOP®

- For tightly stuffed or bulk loaded cargo.
- Requires only 8" 10" (200 250 mm) free space between ceiling and cargo.
- Collector is impact-resistant for added protection in event of shifting cargo.



ABSORBAG®

- For any type of cargo that allows about 4" space (100 mm) between the cargo and the sidewalls and not loaded higher than about 5' (1500 mm) from the floor.
- Most effective with
 15"— 20" (400 500 mm)
 free space between ceiling and cargo.



ABSORLINER

- Ceiling-mounted inside 20 ft or 40 ft containers with double-sided tape.
- Used for moist cargo.
- Very fast absorption combined with high wet strength.
- Designed to function like a drop cloth and be used in combination with ABSORBAG®, ABSORTOP® or ABSORPOLE® in extreme conditions to prevent container rain from reaching the cargo.





BUFFERS USA" 🗘

Securing Your Containers. Protecting Your Cargo.

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Email: sales@buffersusa.com www.buffersusa.com

E-SORB™. Next Generation COST-EFFECTIVE AND NON-TOXIC Desiccant Bags for PACKAGING.

- Reduces and controls moisture inside all types of packaging.
- Each bag capable of absorbing over 200% of its dry weight at high humidity levels.
- The absorbent material effectively locks in trapped moisture to reduce re-evaporation.
- Safe, non-toxic materials. Dispose in regular waste.



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