

SUPER DRY DESICCANT

PROTECT YOUR GOODS FROM MOISTURE



SUPER DRY

SUPERIOR CONTAINER DESICCANT



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SUPER DRY desiccants effectively remove moisture from inside containers and packaging. Keeping your goods dry and safe.

THE SUPER DRY STORY

Our story begins in the year 2000, when 3 Executives from the manufacturing, shipping and surveying industries combined their knowledge and experience, to address a serious problem they all had experienced – moisture & mold damages to products shipped in containers. Since establishing our first factory in Indonesia, we continue to grow steadily and today operate a global sales and service network.

SUPER DRY is a global leader in Calcium Chloride desiccants. We specialize in moisture damage prevention solutions.

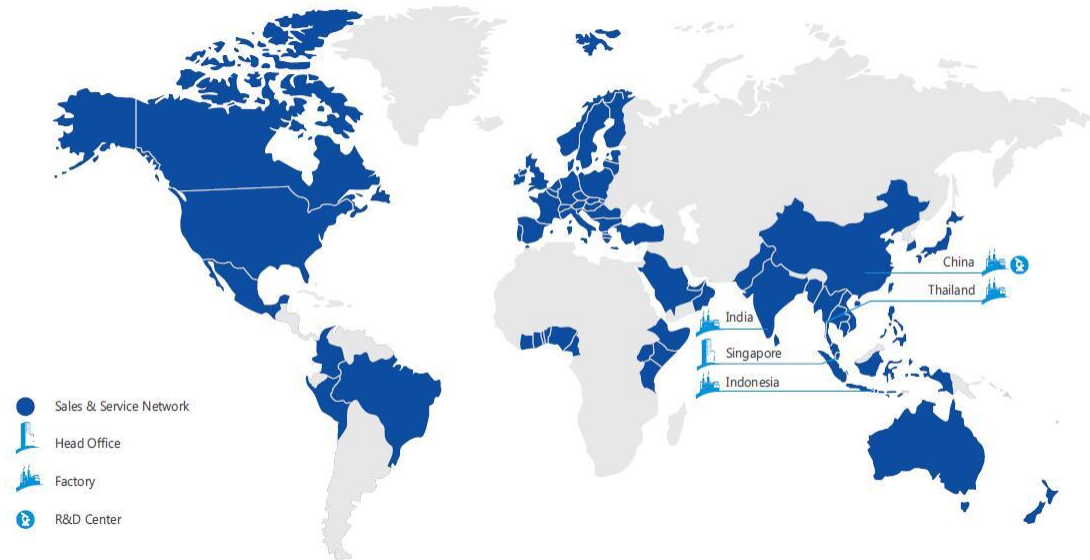
We operate 4 factories strategically located along the Asian manufacturing belt. We take pride in our state-of-the-art R&D center which is equipped with the most sophisticated technology ensuring the safest and most effective products available in the industry. SUPER DRY sets the standards for quality and effectiveness and we are committed to providing our customers with the best products and services available in the market.

Knowledge & Expertise are the pillars of our production, R&D and service processes.

We provide continuing education and on-site training for our team members, an important investment to ensure that we stay ahead of the market. Our business is supported by a team of specialists in every business field providing the best products and services at the highest quality level to our customers.

The SUPER DRY team

Commitment and dedication caring for your goods



The SUPER DRY '5 Steps' Approach

For your most effective moisture control. We do more than merely sell desiccants. With a comprehensive range of products and services SUPER DRY protects your goods from factory to destination.

Factory audits

Our team of auditing specialists support your factories in detecting moisture damage risks. We check your existing supply chain and provide you with an improvement plan to minimize moisture damage risks at the source.

Climate chamber tests

The SUPER DRY R&D center is equipped with climate chambers where we can simulate the effects of temperature and moisture during transport and storage.

DESICCANT

Training & Seminars

We offer customized supplier seminars and staff training. We have a holistic approach, raising risk awareness at every staff level, pin-pointing on-site risks and highlighting moisture damage prevention solutions.

Transport control

Tagging your shipments with digital data loggers which record temperature and humidity inside container and packaging during real time transport.



Desiccants

SUPER DRY desiccants are made from highly hygroscopic Calcium Chloride and starch engineered to absorb moisture from the air, thus reducing the humidity in a controlled environment like poly bags, carton boxes and containers.

Our proprietary desiccant formula turns moisture into gel, contained and leakage free, eliminating any risk of re-evaporation or spillage which can harm your cargo.



Advanced packaging materials and sealing technique

Using the most advanced packaging materials and sealing technique, SUPER DRY dual layer, mono-permeable membrane technology safely locks the moisture.



**One-way venting
packing materials**



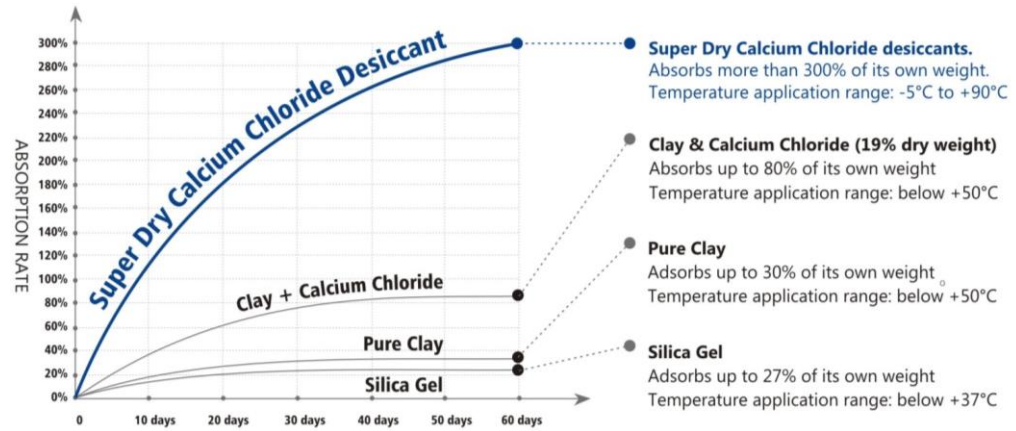
Dual layer design

Inner layer : Tyvek¹
Outer layer : High grade
non woven materials

¹Tyvek is a registered trademark of DuPont.

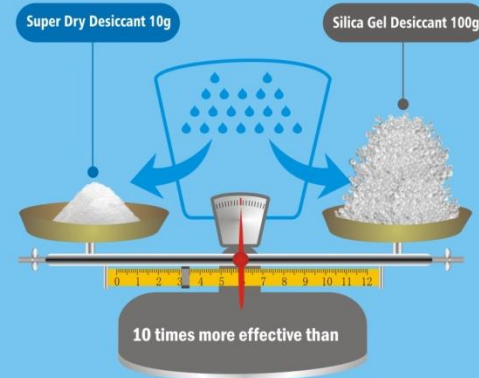
SUPER DRY desiccants have a proven absorption capacity of more than 300% of its own weight and remain active for up to 90 days. Our desiccants have an absorption capacity 8 to 15 times higher than other common desiccant types, with a wide temperature application range from -5°C to $+90^{\circ}\text{C}$. SUPER DRY desiccants are the superior solution for moisture damage prevention inside containers, transport boxes and product packaging's.

Constant test conditions over 60 days: Temperature = 28°C and



Example

Inside a hermetically sealed box of 1 cubic meter at 35°C and 80% relative humidity, there are 31 grams of moisture in the air. To absorb those 31 grams of moisture, 100 grams of common desiccant is required but only 10 grams of SUPER DRY desiccant will absorb this amount of moisture. This makes SUPER DRY desiccants extremely effective and cost efficient in comparison to common desiccants.





Moisture damage is a risk factor in every supply chain

Excessive moisture is a destructive force during transportation and storage which can lead to

- **Mold & Mildew**
- **Warping, Deterioration & Malfunction**
- **Caking**
- **Corrosion**
- **Staining & Discoloration**
- **Odor**

Mold plays an important part in nature by breaking down organic materials. Mold spores are commonly found in the ambient air, house and factory dust. Mold requires 2 basic conditions for optimal growth: moisture and nutrition.

Corrosion can lead to structural damage of a product but only slight amounts of corrosion will affect its commercial value. Water is the most common catalyst for corrosion.

Warping, Deterioration & Malfunction describe the mechanical or electrical failure of materials, products or packaging. Excessive moisture leads to loss of strength or deformation and induced stain causes malfunction of components.

MOISTURE DAMAGE PREVENTION

Humidity control measures at all levels of the supply chain are your best strategy to minimize the risk of moisture damage. Establishing processes and enforcing housekeeping rules is critical for success. Our team of auditing and training specialists will help you and your suppliers to fit moisture prevention measures into the quality management system.

1

Material Receiving

- Keep unloading area dry and clean
- Unload only in dry conditions or under protective cover
- Check incoming goods for visible moisture
- Measure moisture content of critical materials
- Unload goods on dry and clean plastic pallets



2

Material storage & Product storage

- Keep storage areas dry, clean and well ventilated
- Store materials, semi-finished or finished goods and waste separate
- Store goods with high natural moisture content separate
- Keep relative humidity level in storage areas below 60%
- Use dry and clean plastic pallets for material and product storage
- Keep space between building walls and stored materials



3

Production

- Keep production areas dry, clean and well ventilated
- Keep equipment and support materials dry and clean
- Separate wet processing areas
- Avoid unnecessary storage at production areas



4

Packaging

- Keep packaging area dry, clean and well ventilated
- Use only dry and clean packaging material
- Pack only fully dried products



5

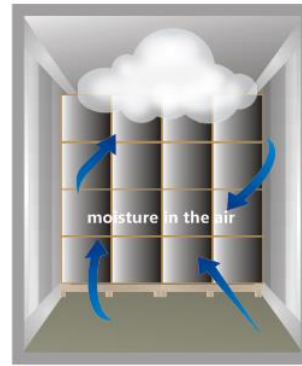
Loading & Shipping

- Keep loading area dry and clean
- Load only in dry conditions or under protective cover
- Inspect containers or trucks regarding visible damage, dirt, moisture and odor
- Measure the moisture content of wooden floors for containers and trucks.
- The moisture content shall not exceed 20%

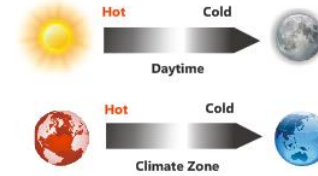




Containers provide an ideal micro-climate to increase moisture damage risks. The temperature inside the container will fluctuate widely increasing the risk of water condensation. This follows the basic principle that cold air can hold less moisture than hot air.

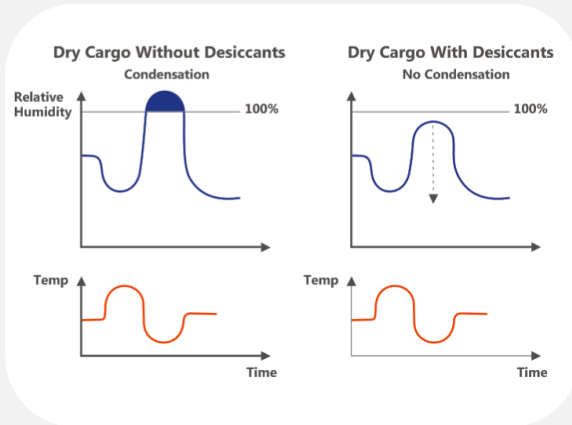


Moisture originates from :
 Cargo
 Packaging
 Container floor
 Damp air from outside



Moisture leads to :
 High RH levels
 Cargo sweat
 Container rain

Which cause :
 Mold growth
 Oxidation
 Deformation
 Malfunction



When the container is exposed to temperatures below the dew point, the moisture from the ambient air will condensate, most visible at the ceiling and walls of the container. This water can drip on to the cargo. A process commonly known as container rain. Condensation can also appear inside the packaging of the merchandise. This is a repeating process during transport, which increases the risk of moisture damage, like mold growth, corrosion, deformation, malfunction and odor.

SUPER DRY desiccants reduce the relative humidity inside the container and packaging well below the dew point at any time during transport and storage. Protecting your cargo from the damaging effects of water condensation.

SUPER DRY

container and packaging desiccants

SUPER DRY desiccants directly target the cause of moisture related cargo damage. Our desiccants effectively remove moisture from the ambient air thus keeping the humidity level inside your container and product packaging below the dew point.

SUPER DRY desiccants have a proven absorption capacity of more than 300% and remain active for up to 90 days. The absorbed moisture is turned into a gel, leakage free. No spillage and re-evaporation.

We offer a wide range of desiccant sizes and designs to fit your loading pattern during transport and storage.

SUPER DRY – superior desiccants for the safety of your goods.



CONTAINER DESICCANT



Whether you ship containerized bulk loads, agricultural products, merchandise goods, industrial products or hanging garments. SUPER DRY offers a wide range of container desiccants for each application.

SUPER DRY container desiccant have a cellular bag structure. Improving absorption efficiency and safety against mechanical damage.

Our container desiccants are available in sizes from 200 grams to 2,000 grams bags with hooks, strings or as self-adhesive bags.



Flat lying



Hanging with hook



Hanging with string



Self-Adhesive

SMALL PACKAGE DESICCANT

SUPER DRY small size desiccants are designed for application in cartons, boxes or poly bags.

Placed together with your goods the desiccant targets moisture inside the product packaging to ensure that your goods arrive in perfect condition.

We offer a complete range to match your requirements.



Our small size desiccant line is available in sizes from 2 grams to 100 grams.





The STICKY PACK desiccant line is available in sizes from 2 grams to 250 grams.

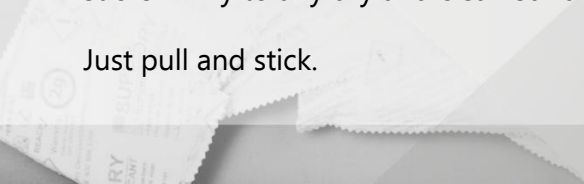
STICKY PACK

SUPER DRY STICKY PACK combines the excellent moisture absorption capacity of our standard desiccant bags with a highly effective adhesive surface for easy application. The Sticky Pack sticks firmly to any dry and clean surface.

Just pull and stick.



The layer of transparent film has a highly effective adhesive. It sticks to any dry and clean surface.





SUPER DRY takes its regulatory responsibility seriously.

We are in full compliance with legal obligations in our markets as well as with customer specific requirements.

SUPER DRY is REACH registered and our products are labeled according to CLP regulations.

Our desiccants are regularly tested and certified by independent testing institutes.

SUPER DRY is certified according to ISO 9001 and ISO 14001.



6 CORE ADVANTAGES

1

ABSORBS MORE THAN 300% OF ITS OWN WEIGHT

SUPER DRY's absorption rate is 10-15 times higher than that of common desiccants.

3

MOISTURE IS TURNED INTO GEL LEAKAGE FREE

Moisture is locked without any risk of spillage and re-evaporation.

5

REACH registered NON TOXIC AND DMF FREE

Tested by independent institutes.
Compliant with international standards.

2

ACTIVE FROM 1st DAY OF USE EFFECTIVE FOR UP TO 90 DAYS

SUPER DRY - safety for your goods from factory to customer.

4

BROAD APPLICATION TEMPERATURE RANGE FROM -5°C to +90°C

SUPER DRY desiccants are effective in all transport & storage environments worldwide.

6

GLOBAL SALES & CUSTOMER SERVICE NETWORK

We know our customers and markets.
Serving you wherever your businesses are located.

Moisture control is the most effective measure to prevent damage

We are happy to support you. Please contact us.

marketing@altunegypt.com
www.altunegypt.com