



# INDUSTRIAL DESICCANT

ABSORB WISELY, REST ASSURED

# OUR MISSION

Founded in 2001, WiseSorbent has been an innovator in sorbent technology for over 22 years. Focusing on moisture-proof and humidity control solutions, we are driven by innovation and supported by strong technology, working hard to provide the best products and services to the pharmaceutical, healthcare, diagnostic reagent, food, industrial, and container shipping industries.

Our mission is to protect your products from moisture damage. There are five production bases located in the north, east, and south of China, one branch in the United States with production capacity, and multiple warehouses around the world. Our production is strictly following ISO15378, ISO9001, US FDA DMF, and other quality management systems. We always focus on developing client satisfaction by providing fast delivery and high-quality products.

WiseSorbent pays close attention to the Global Sustainable Development Strategy (ESG) of the United Nations. We believe a better and healthier life can be achieved through innovation and excellent service.



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## Traditional Desiccant & DIN/ MIL Standard Desiccant



WiseSorb®  
Silica Gel Desiccant



WiseSorb®  
Indicating Silica Gel Desiccant



WiseSorb®  
Molecular Sieve Desiccant



DIN/ MIL standard  
Clay Desiccant



DIN/ MIL standard  
Kraft Paper Clay Desiccant



WiseSling™  
String Sewn Clay Desiccant

# WiseSorb® Silica Gel Desiccant



Silica gel raw material, high moisture absorption capacity, non-toxic and harmless



Flash PE Coated Film packaging material has good breathability, dust-proof functionality, strong strength and seal strength



Silica gel is stable both physically and chemically. It is not combustible or corrosive



Specs vary from 20-500g, applicable in multiple industrial uses



Silica gel raw material is reusable





Customized products available


WiseSorb® silica gel desiccant utilize silica gel as raw material. Silica gel has strong moisture absorption capacity, is stable both physically and chemically, and is not combustible or corrosive. Good breathability Flash PE Coated Film is used as packaging material. This type of desiccant is widely used in metal processing, machine manufacturing, electric manufacturing & clothing industries for moisture prevent and proper storage.


# WiseSorb® Indicating Silica Gel Desiccant




 Indicating silica gel raw material is non-toxic and harmless. Color changes from orange to green after absorbing moisture

 Visible change is convenient for confirming the saturation of moisture absorption and can be replaced in time to continuously protect the product

 The translucent packaging material can easily check the color changes

 Reactivate and reusable, environmentally friendly

 The patented Verna packaging material has strong strength, good breathability, and dustproof functionality

WiseSorb® indicating silica gel desiccant has strong moisture absorption capacity, color changes from orange to green after absorbing moisture. Patented Verna Paper with good breathability, dustproof functionality, strong strength and seal strength is used as packaging material. This type of desiccant is widely used in metal processing, machine manufacturing, electric manufacturing & clothing industries for moisture prevent and proper storage.

# WiseSorb® Molecular Sieve Desiccant



Premium quality Molecular Sieve raw material, high moisture absorption capacity, non-toxic and harmless



The fiber paper packing material has the characteristics of high mechanical strength, high temperature resistance, dust prevention, good air permeability and high heat sealing performance



The physical and chemical properties of Molecular Sieve are stable, nonflammable and non-corrosive



Specs vary from 20-500g, applicable in multiple industrial uses



Customized products available

WiseSorb® molecular sieve desiccant is a kind of aluminosilicate compound with cubic lattice. It has uniform microporous structure, and its pore diameter is uniform. These pores can adsorb molecules which diameters are smaller than them into the cavity, and have preferential adsorption capacity for polar molecules and unsaturated molecules. Therefore, they can separate molecules with different polarity, saturation, molecular sizes and boiling points, which means it has the function of "screening" molecules, so it is called molecular sieve. Molecular sieve has been widely used because of its high adsorption capacity, strong thermal stability and other advantages.

# DIN/ MIL standard Clay Desiccant



Anti-static treatment



Material recyclable



Premium quality packaging material.  
Low dust, high breathability

**MIL**

Comply with MIL-D-3464E



Applicable in multiple industries

DIN/ MIL standard clay desiccant's raw material, manufacturing procedure, inspection, packaging, and transportation are strictly followed MIL-D-3464E standard. This type of desiccant can be widely used in storage and transportation for machinery, electronic products, auto parts, large devices, etc.



# DIN/ MIL standard Kraft Paper Clay Desiccant



High-quality montmorillonite and pure kraft paper as raw materials, natural, environmentally friendly, and degradable



Montmorillonite is chemically stable, non-toxic, and harmless



Kraft paper packaging material has high toughness, not easy to break and dustproof



Diverse application scenarios; affordable, low cost, suitable for both industrial and household use



Variety of specifications, comply with the US MIL-D-3464E standard

Kraft paper clay desiccant is an environmentally friendly degradable desiccant that uses natural high-quality montmorillonite as raw material and pure kraft paper as packaging material. Kraft montmorillonite desiccant has different product specifications. It complies with the US MIL-D-3464E standard.

The application fields are diverse. It is suitable for the transportation of heavy industry, metal products, auto parts, and all other products in the industry. At the same time, the degradability and low-cost features make this product also suitable for household products.

# WiseSling™ String Sewn Clay Desiccant



**MIL** Comply with MIL-D-3464E Standard



High moisture absorption capacity, non-toxic and harmless



Non-woven fabric/kraft paper packaging materials have the characteristics of high strength, dust prevention, good air permeability, and high sealing performance



The large unit hangable design meets the transportation and storage needs under different scenarios



High-quality montmorillonite and pure kraft paper (16U/32U) as raw materials, natural, environmentally friendly, and biodegradable



Non-woven fabric-80Units



Kraft-32Units



Kraft-16Units

## Dedicated Desiccant & Special Desiccant



WisePower™  
High Performance Desiccant



WisePower™  
Indicating High Absorption Desiccant



WisePac®  
Dry Breather



WiseCargo®  
Container Desiccant

# WisePower™ High Performance Desiccant



High absorption capacity under low humidity rate. Its absorption capacity is four times more than silica gel or montmorillonite desiccant of the same weight under 77°F /25°C , RH40%



Turns into lump shape solid after moisture absorption, avoid leak



Water doesn't escape after absorbed



Flash PE Coated Film packaging material, prevents leak



Wide range of application. Can be used in various industries

WisePower™ high performance desiccant utilizes magnesium chloride as main moisture absorption ingredient. Moisture absorption capacity of high performance desiccant is much higher than traditional silica gel and montmorillonite desiccant, especially under low humidity rate. Compared to calcium chloride which turns into gel after moisture absorption, high performance desiccant turns into lump shape solid after absorbing moisture, which avoid leaks. It removes moisture in a chemical method, which prevents moisture escape after absorption due to temperature and pressure changes. This product can be widely applied in various industries in replacement of silica gel and montmorillonite desiccant.

# WisePower™

## Indicating High Absorption Desiccant



Powder formula, light weight. Ultra-thin, save space



Indicating material, visible window for replacement check



High moisture absorption, made of calcium chloride, starch and diatomite



Breathable package material with four side sealing design, higher edge strength

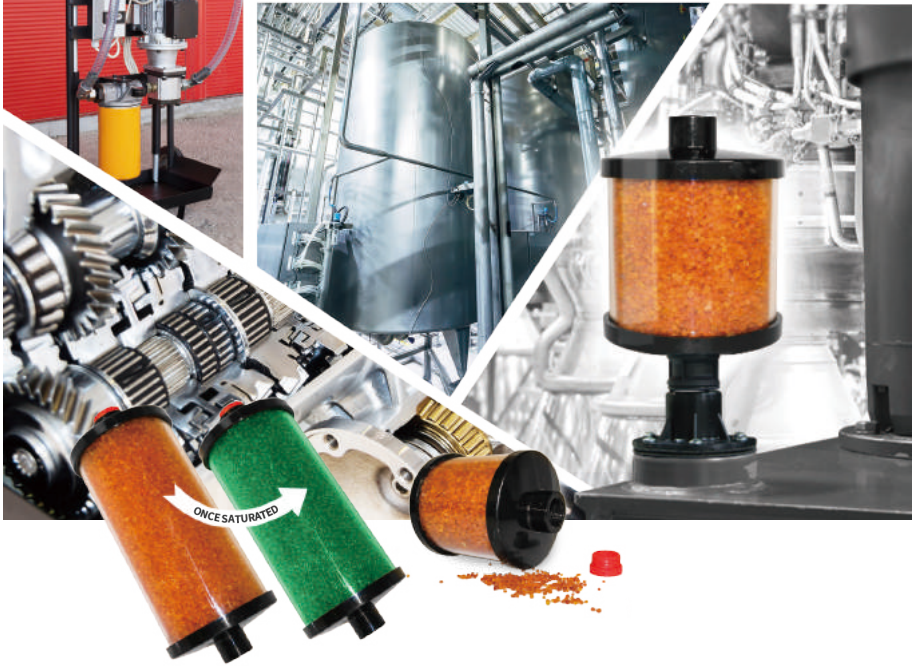


Wide range of uses, especially in ocean transportation

WisePower™ indicating high absorption desiccant is a type of desiccant which is made of calcium chloride, starch and diatomite. It has color changing function and high absorption performance. Under the 38 °C and RH90% condition, its hygroscopic capacity can reach about 280%. When the color of high absorption desiccant changes from light brown to dark brown, the desiccant should be replaced. Indicating high absorption desiccant has been widely used in different occasions where high moisture absorption is needed, and the most used occasion is container ocean transportation.

The desiccant may have liquid water seepage under the extreme environmental adsorption supersaturation. Therefore, this product is not suitable to directly contact with metal and other substances.

# WisePac<sup>®</sup> Dry Breather



Indicating silica gel, high moisture absorption capacity. You can tell if the Color changes from orange to green after absorbing moisture



PC shell, high mechanical strength, creep resistance, shock strength



Widely used in gearbox, hydraulic oil, oil tank, transformer, etc. to extend device use life



Standard size design, easy to install

WisePac<sup>®</sup> dry breather utilize PC material as shell, which has high mechanical strength, creep resistance, shock strength. Indicating silica gel with high moisture absorption capacity is used as desiccant material. You can tell if the desiccant is fully saturated by looking at its color. It is easy to install and can be used in gearbox, hydraulic oil, oil tank, transformer, etc. to prevent contamination and moisture from outside and extend device use life.

# WiseCargo® Container Desiccant



High absorption rate:  
The moisture absorption capacity  
higher than 350% at 100 °F (38°C) /  
RH90%



No water leak: Flash PE Coated Film  
and composite non-woven double-layer  
packaging are adopted to effectively  
prevent liquid reverse osmosis after  
moisture absorption



Suitable for various scenarios:  
It can be placed, hung and used  
conveniently



Protect cargo safety :  
Prevent "container rain" and protect  
cargo safety

Wiscargo® container desiccant is a kind of special desiccant developed to protect goods from moisture during ocean transportation. It uses calcium chloride as moisture absorption material and has high moisture absorption capacity. It can control the relative humidity in the container and avoid the generation of condensation in the container, so as to protect the goods.

Raw Absorbents Materials & Accessories



WiseSorb®  
Bulk Raw Materials



WiseHIC®  
Humidity Indicator Card

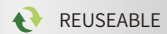


# WiseSorb®

## Bulk Raw Materials



### High-quality silica gel



High-quality silica gel uses physical adsorption. It has a strong moisture absorption capacity and both chemical and physical stability. It is also non-corrosive, non-toxic, and harmless. The silica gel can be reused after being reactivated. Normally, the silica gel particle size is 2-4mm. And silica gel has transparent white gel (white gel type A, white gel type B) and indicating silica gel. Indicating silica gel has an indicating function. The state of moisture absorption can be judged by the change of colors. At 25°C, Rh20%, the silica gel will start to change color after absorbing moisture and completely changes color after absorbing moisture under the condition of RH50%-60%. Based on different types of indicating silica gel, the color can be changed from blue to red, orange to light green, orange to dark green, or orange to white.



### Molecular sieve



Molecular sieve uses physical adsorption and can be reused after being reactivated. It has a strong moisture absorption ability at low humidity, high-temperature resistance, and good stability. Molecular sieve is a kind of alkali metal aluminosilicate, the main types are 3A, 4A, 5A, and 13X. The particle size is 1.5-2.5mm. Among them, the 13X molecular sieve has a pore size of 1 nm and is capable of adsorbing molecules less than 1 nm. It can be used as a catalyst carrier, water, and carbon dioxide co-adsorption, and water and hydrogen sulfide gas co-adsorption.

Calcium montmorillonite is a natural mineral with interlayer cations of calcium ions. Its appearance is mainly a 1-4mm white or light yellow particles, and it also has gray, purple, and other colors due to different iron content. Montmorillonite adopts physical adsorption and can absorb more than 17% of its weight of water vapor at 25° C and RH40%. Montmorillonite particles can be reused after being reactivated. It is a natural, environmentally friendly, economical, and affordable adsorbent material.



## Calcium chloride

Calcium chloride utilizes premium quality raw material that can absorb moisture from the air rapidly and can be used as a multi-purpose desiccant in the industrial field, such as for drying nitrogen, oxygen, hydrogen, hydrogen chloride, sulfur dioxide, and other similar compounds. It can be used as a dehydrating agent in the production of alcohols, esters, ethers, and acrylic resins.



## Activated alumina

Activated alumina is a chemical adsorbent suitable for many industrial fields. The particle size is 3-5mm. It has porosity, uniform particle size, and a smooth surface. As an adsorbent, activated alumina is mainly used in various fields such as industrial gas drying, liquid drying, and water purification.



3A



4A



5A



13X

## Molecular sieve active powder

Molecular sieve active powder has strong moisture absorption capacity in low temperatures with low humidity or high humidity environment. It can be used as an additive for glass composite strips, coatings, paints, and other adhesives.



# WiseHIC®

## Humidity Indicator Card



HIC-1



HIC-4



HIC-5



Customizable indicating humidity rate



Wide moisture indicating range



Customizable indicating humidity rate



Flat and compact, easy to use anywhere



High accuracy at  $\pm 5\%$

WiseHIC® Humidity Indicator Card is a card designed specifically for industrial use, accurately displaying the humidity level in enclosed environments. It boasts a wide humidity testing range (8%~90%), with standard specifications including a single point (8%), three points (10%~30%), six points (10%~60%), and nine points (10%~90%). We offer three series of products to cater to all customer needs: Cobalt Chloride - transitioning from blue to pink, Cobalt-Free - shifting from brown to green, and Cobalt Chloride-Free - changing from blue to pink. These cards are suitable for various electronic component packaging and vacuum environments. Additionally, we can also provide customized products.



# WISORBENT

*T e c h n o l o g y*



• For additional desiccant solutions visit [WISORBENT.com](http://WISORBENT.com) •

**WISORBENT TECHNOLOGY LLC**

11 E Stow Rd, Marlton, NJ 08053, USA  
[info@wisesorbent.com](mailto:info@wisesorbent.com)

**Call today**  
to place an order  
**+1 (800) 272-5238**

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