

# 1. Moisture Barrier Bag



## **Product Code: DY3800**

Moisture Barrier Bags provide moisture, corrosion and shielding protection for sensitive components. All MBBs are amine and amide free, pass out-gassing, corrosion tests and exceeds the requirements of EIA-583, EIA-541, EIA-625, IPC/JEDEC J-STD-033 and MIL-PRF-81705 Type 1 standards.

Customized sizes.

# 2. Vacuum Sealers



## **Product Code: DY3303**

There is a wide range of vacuum sealers available for different types of operation. Sealers with retractable nozzle, vertical sealing and double chamber functions are available to cater for different sealing needs. The Body of the sealers is made of stainless steel, making these sealers suitable to be used in Electrostatic Protected Area (EPA).

The sealers also come with optional accessories like double heating elements for sealing thick bags, gas flushing function for purging gases like N<sub>2</sub>/ Compressed Air/ Oxygen into packaging before sealing.

Clean room models, with exhaust, to be used in a clean room environment are also available.

### 3. Clay Desiccants



Bentonite clay is naturally occurring absorbent created by the controlled drying of magnesium aluminum silicate of the sub-bentonite type. This clay will successfully regenerate for repeated use at very low temperatures without substantial deterioration or swelling. However, this property causes clay to give up moisture readily back into the container as temperatures rise.

Clay is a good basic desiccant that works satisfactorily below 120°F (approximately 50°C). Above 120°F, there is a possibility that the clay will give up moisture rather than pulling it in, so anticipated storage and transportation conditions should be considered. The upside to clay is that it is normally the least expensive desiccant per pound.

Clay is highly effective within normal temperature and relative humidity ranges. Its appearance is that of small gray pellets. Care should be taken to be sure that any low level impurities in the clay are not incompatible with the packaged product.

Bentonite clay is a natural desiccant which is economical and easily available. It works well at relative humidity levels of 15% to 50% but loses out to molecular sieve at very low RH. It has a reactivation temperature of about 120°C.

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#### Clay desiccants in Tyvek

Clay Desiccants	Bag Size	Packaging
1/3 unit	75 x 60mm	700BAGS/TIN
1/2 unit	85 x 75mm	500BAGS/TIN
1 unit	4 x 4in	250BAGS/TIN

2 unit	5.5 x 4in	125BAGS/TIN
4 unit	6.5 x 4in	70BAGS/TIN

#### Clay desiccants in static dissipative non-woven

Clay Desiccants	Bag Size	Packaging	SR
1/3 unit	75 x 60mm	700BAGS/TIN	SR<=10
1/2 unit	85 x 75mm	500BAGS/TIN	SR<=10
1 unit	4 x 4in	250BAGS/TIN	SR<=10
2 unit	5.5 x 4in	125BAGS/TIN	SR<=10
4 unit	6.5 x 4in	70BAGS/TIN	SR<=10

## 4. Humidity Indicator Card

(Cobalt Free HIC 5% 10% 60% R. H.)



#### Specifications

<b>Product</b>	3 Spots Humidity Indicator Cards Type 5% 10% 60%, in complies with JEDEC J-STD-033B Standards
<b>Definition</b>	A card on which a moisture-sensitive chemical is printed such that it will change color from brown to light blue (azure) when the indicated relative humidity is exceeded. The indicator does not contain cobalt

<b>Product Description</b>	<p><b>Shape:</b> Rectangular</p> <p><b>Dimensions:</b> 54 mm x 38 mm ± 3 mm</p> <p><b>Color Change:</b> Brown (dry) - Light Blue (wet)</p>
<b>Applications</b>	<p>It shows the relative humidity content in the environment.</p> <p>Each spot is calibrated to change its color when the indicated percentage of relative humidity is exceeded.</p> <p><b>How to read them:</b> Observing the spots color (the color of the areas that are impregnated with the moisture-sensitive chemical), the humidity value in the environment is the one recognized by the spot that is no more Brown and not yet Light Blue.</p>
<b>Technical Specifications</b>	<p>3 Spots Humidity Indicator for relative humidity included between 5% - 10% and over 60%.</p> <p><b>Support:</b> High porosity paper of white color</p> <p><b>Indicated percentages of R.H.:</b> 5%, 10%, 60%</p> <p><b>pH:</b> n.a.</p> <p><b>Color change on the indicating surface:</b> ± 2% tolerance</p> <p><b>Chromatic response:</b> The indicator needs a time of response included between 1 and 2 hours, depending on the humidity content of the environment.</p>
<b>Stocking</b>	<p>Keep the product in a dry and sheltered place with temperature above 0°C. The information given is in accordance with our best technical knowledge but they cannot be considered as a warranty of the products. Shelf life is 2 years.</p>
<b>Warnings</b>	<p>Avoid the product contact with metallic materials and preserve it from possible chemical contaminations which would invalidate its effectiveness.</p>

## 5. Part Bins & Components Storage Rack



Conductive part bins are ideal for storing electrostatic sensitive devices. They can be used with assembly racks to create an organized grounded storage system.

The conductive component rack provides a systematic storage of electrostatic sensitive devices. It consists of 20 small drawers housed in a rectangular rack.

## 6. PCB Storage Solutions



PCB of all sizes are held simply and safely with WEZ circuit board holders. There are various sizes available to suit different BlackLine containers, ensuring good protection in a visible and organized manner throughout production, testing and storage.

## 7. Carbon Nanotube Trays



**Product Code: DY5003**

Customize packaging and shipping thermoformed trays, which are ideal for most internal and external transportation needs for the semiconductor, electronics and medical industries. We control all aspects in terms of the design and manufacturing process, having our own R&D, engineering tooling and QA departments.

Superior Clean material with excellent shielding and ESD features. Ideal for sensitive devices and clean room compatible

- Thickness: From 0.3mm – 1.2mm
- Surface Resistance:  $1.0 \times 10^4 - 1.0 \times 10^{11} \Omega$
- Maximum tray dimensions: 700 x 500mm