



Dry Packaging Products

Desiccants – Sieve Pak™ • Bentonite Clay • Silica Gel
Humidity Indicator Cards – Standard • Cobalt Free

DOU YEE ENTERPRISES

Dou Yee Enterprises is the premier total industrial solutions provider in the Asia Pacific region, serving with distinction the semiconductor, data storage, electronics and biomedical industry since 1982.

We have 42 international branch offices strategically located around the world to give customers the fastest and most accessible products and services. Our manufacturing plants, located in Singapore, Malaysia (Seremban), China (Suzhou) and France are governed by consistent quality systems with ISO 9001:2015 and ISO 14001:2015 certifications.

You can rely on us for products and services that are comprehensive in range, reliable in quality, accessible in location, and backed up by our many years of experience and expertise.

Dou Yee, your preferred partner in the industrial world.



Singapore (HQ)



Malaysia (Senawang)



China (Suzhou)



France

Our Test Facilities



To ensure that you are receiving quality products, Dou Yee has the equipment and necessary quality control in place.

We do our own in-house moisture absorption test to ensure that

- Desiccants delivered to you are in good condition and still effective.
- The sealing strength of the bag is strong and the bag does not burst easily, causing spillage of desiccants onto your products.



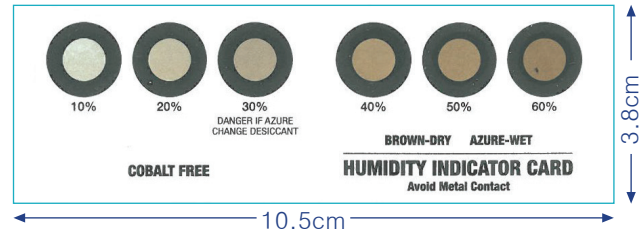
Humidity Indicator Cards

Humidity indicator cards are used in dry packing for detecting the humidity level in the dry pack environment. The indicating spots on the card are impregnated with a moisture sensitive chemical which will change color upon absorbing moisture. By varying the concentration of this chemical, the color change of the chemical can be controlled at different humidity levels. Thus, by reading the color change on the indicating spots, the user will be able to identify the actual level of humidity in the dry pack environment.

Existing humidity indicator cards found in the market are impregnated with a chemical called cobalt chloride. In the dry state, cobalt chloride is blue in color. After absorbing moisture, cobalt chloride changes to pink color. A recent amendment made to the European CEE directive 67/548, pertaining to the Classification, Packing and Labeling of dangerous materials, has classified cobalt chloride as a carcinogenic material. Improper handling of items containing carcinogen may cause health hazards and environmental hazards, thus, goods containing cobalt chloride will not meet EU standards.

Our new range of humidity indicator cards are carcinogen-free. The indicating spots contain a proprietary chemical which, in the dry state is brown in color. After absorbing moisture, the brown color changes to azure. Specifications will be provided upon request.

HI-1060



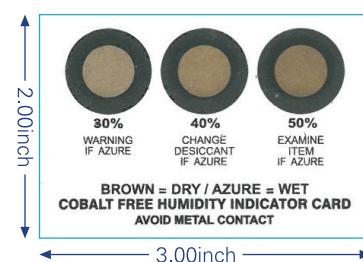
DESCRIPTION	CHARACTERISTICS
Indicates	10%, 20%, 30%, 40%, 50%, 60% relative humidity
Material	Blotting Paper
Dimensions	10.5cm x 3.8cm
Indicating Spots	5%, 10%, 60% (left to right)
Printing	Heavy Black On White
Packaging	200 pcs per pint can
Approx. Shipping Weight	20oz. per can
Standards	Meets Mil-1-8835 & REACH Regulation

HI-051060



DESCRIPTION	CHARACTERISTICS
Indicates	5%, 10%, 60% relative humidity
Material	Blotting Paper
Dimensions	5.4cm x 3.8cm
Indicating Spots	
Left	5% RH
Middle	10% RH
Right	60% RH
Printing	Heavy Black On White
Packaging	200 pcs/MBB/CAN
Approx. Shipping Weight	15 oz /MBB
Standards	Meets Mil-1-8835 & REACH Regulation

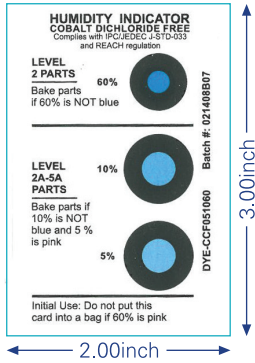
HI-345-S



DESCRIPTION	CHARACTERISTICS
Indicates	30% 40% 50% relative humidity
Material	Blotting Paper
Dimensions	2.00inch x 3.00inch
Indicating Spots	30%, 40%, 50% (left to right)
Printing	Heavy Black On White
Packaging	125pcs per pint can
Approx. Shipping Weight	8oz. per can
Standards	Meets JEDEC J-STD-033

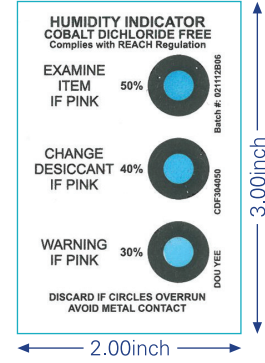
Humidity Indicator Cards

DYE-CCF051060



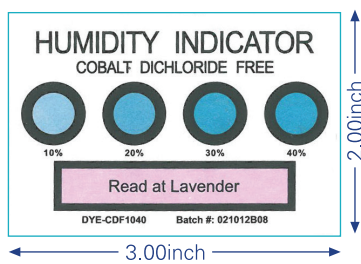
DESCRIPTION	CHARACTERISTICS
Indicates	5%, 10%, 60% relative humidity
Material	Blotting Paper
Dimensions	2.00inch x 3.00inch
Indicating Spots	60%, 10%, 5% (top to bottom)
Printing	Heavy Black On White
Packaging	125pcs per pint can
Approx. Shipping Weight	8oz. per can
Standards	Meets JEDEC J-STD-033

DYE-CDF304050



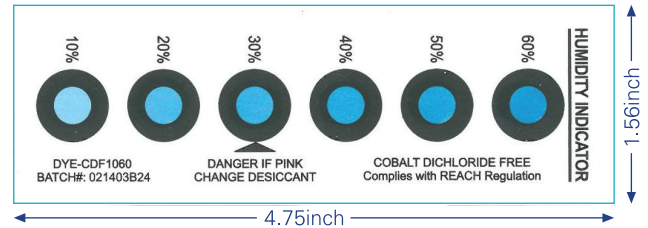
DESCRIPTION	CHARACTERISTICS
Indicates	30%, 40%, 50% relative humidity
Material	Blotting Paper
Dimensions	2.00inch x 3.00inch
Indicating Spots	50%, 40%, 30% (top to bottom)
Printing	Heavy Black On White
Packaging	125pcs per pint can
Approx. Shipping Weight	8oz. per can
Standards	Meets Mil-1-8835 & Mil-P-116 Method II

DYE-CDF1040



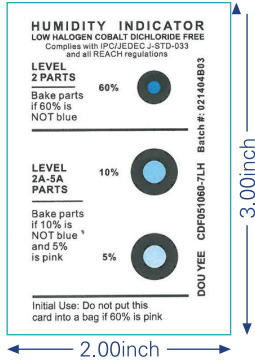
DESCRIPTION	CHARACTERISTICS
Indicates	10%, 20%, 30%, 40% relative humidity
Material	Blotting Paper
Dimensions	3 inch x 2 inch
Indicating Spots	10% - 40% RH
Printing	Heavy Black on White
Packaging	125 pcs per pint can
Approx. Shipping Weight	8 oz. per can
Standards	Meets Mil-I-8835

DYE-CDF1060



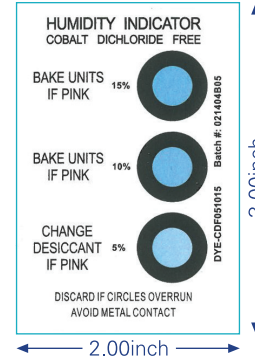
DESCRIPTION	CHARACTERISTICS
Indicates	10%, 20%, 30%, 40%, 50%, 60% relative humidity
Material	Blotting Paper
Dimensions	1.56inch x 4.75inch
Indicating Spots	10% - 60% RH
Printing	Heavy Black On White
Packaging	200 pcs per pint can
Approx. Shipping Weight	20oz. per can
Standards	Meets Mil-1-8835 & Mil-P-116

CDF051060-7LH



DESCRIPTION	CHARACTERISTICS
Indicates	5%, 10%, 60% relative humidity
Material	Blotting Paper
Dimensions	2.00inch x 3.00inch
Indicating Spots	60%,10%,5% (top to bottom)
Printing	Heavy Black On White
Packaging	125pcs per pint can
Approx. Shipping Weight	8oz. per can
Standards	Meets Mil-1-8835 & Mil-P-116 Method II

DYE-CDF051015-LH



DESCRIPTION	CHARACTERISTICS
Indicates	5%, 10%, 15% relative humidity
Material	Blotting Paper
Dimensions	2.00inch x 3.00inch
Indicating Spots	5%, 10%, 15% RH
Printing	Heavy Black On White
Packaging	125pcs per pint can
Approx. Shipping Weight	8oz. per can
Standards	Meets JEDEC J-STD-033

Desiccant Products

Dou Yee can supply molecular sieve, clay or silica gel in various packing material depending on your application and requirements. Our desiccants can be used widely for protecting your goods against harmful effect of moisture and for preventing corrosion. Areas of application includes fry packing for ICs, medical instruments, machine parts, electronic components, optical equipment, tools documents, cameras.



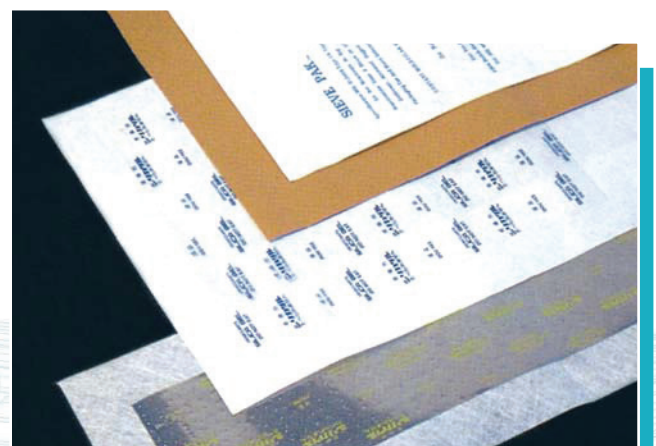
PROPERTY	MOLECULAR SIEVE	SILICA GEL	BENTONITE CLAY
Absorptive Capacity at Low H ₂ O Concentration	Excellent	Poor	Fair
Rate of Absorption	Excellent	Good	Good
Capacity for Water @77°F, 40% RH	High	High	Medium
Separation by Molecular Sizes	Yes	No	No
Absorptive Capacity at Elevated Temperatures	Excellent	Poor	Poor

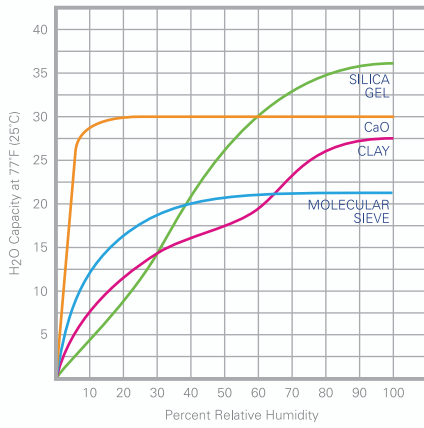
Table 1: Properties of Absorbents

Packing Materials

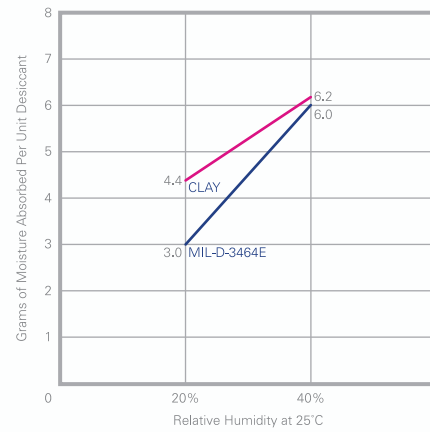
Different types of packaging materials can be used to bag desiccants. In the semiconductor industry, Tyvek® material manufactured by Dupont is commonly used as a bag material for pouching desiccants due to strength, durability and breathability.

Dou Yee can supply desiccants bagged in Tyvek®, Non-woven Fabric, Translucent Static Shielding Film, Clear PP/OPP Film and Kraft paper depending on your requirements. In addition, we also offer our expertise to calculate and recommend the amount of desiccants required for your dry packing.





Graph 1 : Equilibrium Capacity (H₂O) of Various Absorbents



Graph 2 : Comparison of Clay vs MIL-D-3464

BENTONITE CLAY

Product Code	Size	Packing
DY-TY1-CL-0.50U-85X75MM-P40-3S	85x75 mm	500 bags/ctn
DY-TY1-CL-1U-115X75MM-P62-3S	115x75mm	400 bags/ctn
DY-TY1-CL-2UNIT-5.5X4IN-P27-3S	5.5x4 in	150 bags/tin
DY-TY1-CL-4UNIT-6.5X4IN-P28-3S	6.5x4 in	70 bags/tin

PACKING MTRL OPTION: TY1/NW1

SILICA GEL

Product Code	Size	Packing
DY-OP-BR1-5-60X60MM-P01-3S	60x60 mm	1400 bags/tin
DY-OP-BR1-10-70X60MM-P01-3S	70x60 mm	800 bags/tin
DY-OP-BR1-40-110X75MM-P01-3S	110x75 mm	300 bags/ctn
DY-OP-BR1-50-120X100MM-P01-3S	120x100 mm	150 bags/tin

PACKING MTRL OPTION: OP/SF/TY1/NW1/MP

SILICA GEL TYPE OPTION: SGW/BR1/OG1/SW1

MOLECULAR SIEVE

Product Code	Size	Packing
DY-TY1-MS-15-90X75MM-P04-3S	90x75 mm	500 bags/ctn
DY-TY-MS-25-100X54MM-P63-PL	100x54 mm	400 bags/tin
DY-TY-MS-30-110X54MM-P64-PL	110x54 mm	500 bags/ctn
DY-TY-MS-45-115X100MM-3S	115x100 mm	300 bags/ctn

PACKING MTRL OPTION: TY1/NW1/MP



More than **45** offices across
North America, Europe and Asia Pacific

- Manufacturing Plants -

Singapore • Malaysia • China • France • Poland

DOU YEE
ENTERPRISES

HEAD OFFICE

2304 Bedok Reservoir Road,
#05-00 Dou Yee Building, Singapore 479223

Tel: (65) 6444 2678

Website: www.douyee.com

Email: s1_marketing@douyee.com.sg



Branches Contacts



E-Catalogue