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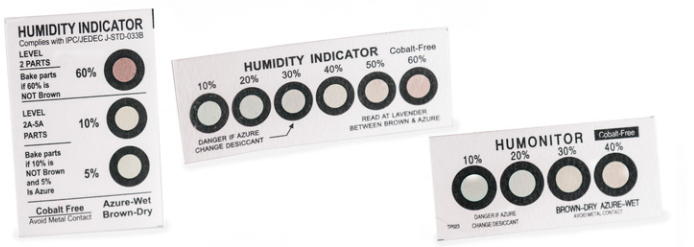
Cobalt Dichloride Free Humidity Indicator Cards

CDFHIC

Description

Standard Cobalt Dichloride Free Humidity Indicator Cards are used to determine when products have been exposed to moisture and humidity above recommended storage levels. They are a low-cost method of indicating humidity conditions inside a moisture barrier bag after vacuum packing. Each Humidity Indicator Card is printed with moisture sensitive spots, which respond to various levels of humidity with a visible colour change from blue to pink. The humidity inside dry packed moisture barrier bags can be monitored by including a humidity indicator card inside. When the bag is opened, the card can be examined for proper dryness inside the bag. This indicates that the barrier bag and the desiccants have functioned correctly.



Part Code	Description	RH %
CDFHIC3	3 Spot, 125 cards/can	5, 10, 60% RH
CDFHIC4	4 Spot, 100 cards/can	10, 20, 30, 40% RH
CDFHIC6	6 Spot, 200 cards/can	10, 20, 30, 40, 50, 60% RH

Cartons have a batch number for QA traceability. Can quantity could vary.

Cobalt Dichloride Free

Cobalt dichloride is a chemical that changes colour when exposed to changing storage levels of moisture and is commonly used in HICs for that purpose. Cobalt dichloride is a chemical regulated under European Chemical Bureau (ECB) REACH and has been identified as a substance of concern for the environment and for that reason Cobalt Dichloride Free HICs provide electronic and semiconductor manufacturers with an IPC/JEDEC J-STD-0.33 compliant humidity card that is free of Cobalt Dichloride and complies with evolving EU and WEEE directives regarding hazardous substances.

Key Features

- Cost-effective
- Can be vacuumed sealed
- Detects moisture and humidity levels in packaging
- Composed of cobalt dichloride free on cardboard
- Colours change on the card to indicate RH levels inside packaging
- Early identification prevents damaged items from entering production
- Conform to IPC/JEDEC 033 and IEC 61340-5-1 standard
- Meets RoHS, REACH, CE and WEEE directive regarding hazardous substances

Specification

Material	Blotting paper, free of cobalt-dichloride (CoCl2)
Accuracy	Based on ambient temperature of 75°F
Tolerance	Approx. 2.5% for each 10°F away from 75°F
Card Size	3 spot: 5cm x 7.5cm 4 spot: 7.5cm x 3.5cm 6 spot: 10.5cm x 3.5cm
Standards	Complies with IPC/JEDEC J-STD-033
Packing	3 spot: 125 cards per can 4 spot: 100 cards per can 6 spot: 200 cards per can

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Colour Change Condition

Spot	Indication at 2% RH environment					
5% spot	Blue (dry)	Lavender (spot value)	Pink (wet)	Pink (wet)	Pink (wet)	Pink (wet)
10% spot	Blue (dry)	Blue (dry)	Lavender (spot value)	Pink (wet)	Pink (wet)	Pink (wet)
60% spot	Blue (dry)	Blue (dry)	Blue (dry)	Blue (dry)	Blue (dry)	Blue (dry)

Handling/Storage

Do not keep open for a long period of time, immediately after each withdrawal, the containers should be tightly resealed. Cards should be used immediately. The highest indicating spot should be blue when the can is initially opened.

- Store in their original containers with desiccant where possible. Containers should be kept sealed.
- Replace desiccant bag after three openings of the sealed container.
- Store in a cool, dry area away from moisture.
- Keep Humidity Indicator Card Spots reversible by placing them in a sealed container with sufficient desiccant for 48 hours, the pink spot will turn to blue.
- Avoid chemicals, water (for quality) and fire (for safety).
- Discard cards if indicating colours overrun black circles.

Hazard Information

Eyes	None known, avoid eye contact - flush with clear water if occurs
Skin	May cause irritation - wash with mild soap and water
Inhalation	May cause irritation

Stability and Reality

Conditions To Avoid	Not applicable in normal use
Materials To Avoid	Not applicable in normal use
Hazardous Decomposition Products	Burning produces carbon dioxide and paper smoke.

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Toxicology Information	
Acute Toxicity	Not determined
Chronic Toxicity	None recognised
Other	None

Ecological Information	
Persistance / Degradability	Not known
Bioaccumulation	Not available
Ecotoxicity	Not known

Disposal Consideration	
Recommended Methods For Safe Environmentally Preferred Disposal	Should be disposed of in an environmentally appropriate manner and in accordance with governmental regulations

Transportation Information	
Specific Precautionary Transport Measures	Store in cool and dry place
Materials To Avoid	None in normal use

Accidental Release Measures

In case of spill or other release, collect and place in a solid container. Take up the contaminated material by mechanical means, load into clean containers and dispose of in accordance with legal regulations.

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