

HUMIDITY INDICATOR CARD

PRODUCT OVERVIEW

A Humidity Indicator Card (HIC) is a simple, reliable visual tool used to monitor the relative humidity (RH) inside sealed packaging environments. Each card features chemically treated spots that change color based on the ambient humidity level, providing a quick, at-a-glance verification of whether moisture has entered the package.

In semiconductor, electronics, and photomask applications, HICs are commonly placed inside Moisture Barrier Bags (MBBs) along with sensitive components such as wafers, IC chips, MEMS, and reticles. Once sealed, the HIC continuously monitors internal conditions. If humidity rises above critical thresholds (e.g., 10%, 30%, or 60% RH), the color change signals that protective conditions have been compromised, prompting inspection or re-drying.



Products of interest:

Desiccant bags (WHS-B-BC8001, WHS-B-MS4001, WHS-B-SG1001)

PRODUCT CLARIFICATION

Part number	Chemistry	Color change	Format	RH Points	Pack quantity
WHS-B-HI001	Cobalt-Free	Blue to pink	Landscape	10%, 20%, 30%, 40%	100pcs per can (10pcs/ per pack - 100pcs/can)
WHS-B-HI002	Cobalt-Free	Brown to azure	Portrait	5%, 10%, 60%	100pcs per can (10pcs/ per pack - 100pcs/can)

WHY USE HICS IN MOISTURE BARRIER BAGS?

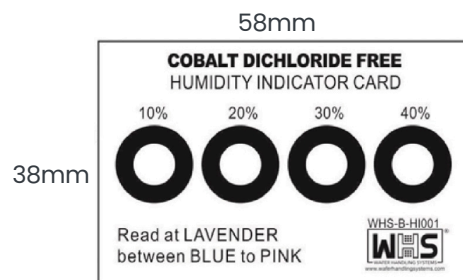
- Confirms low humidity was achieved and maintained during sealing
- Helps validate desiccant performance inside the MBB
- Supports customer QA and compliance for moisture-sensitive device handling
- Required in many industry standards, including JEDEC J-STD-033

PRODUCT DRAWING

WHS-B-HI001 circle size:

Inner diameter: 6.5mm

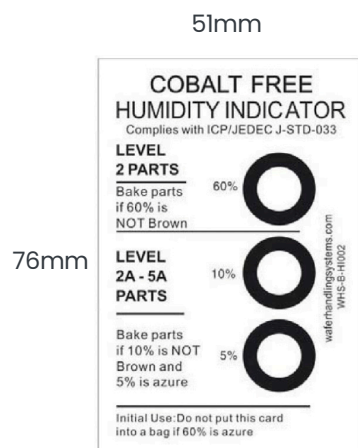
Outer diameter: 12mm



WHS-B-HI002 circle size:

Inner diameter: 8.5mm

Outer diameter: 14mm



STORAGE

Store HIC in dry and cool warehouse, avoid direct sunlight and high humidity especially water leaching. The proposed storage life is 1 year since the production date in the condition that packing tin can is sealed, complete and unopened.

USING INSTRUCTIONS

- Do not touch the indicator circle on the HIC during use.
- Only take out the amount you need each time and avoid leaving the rest exposed to air for more than 5 minutes. If the indicator circle turns pink (WHS-B-HI001) or azure (WHS-B-HI002) before use, it means moisture was absorbed. Dry it back to blue before using.
To dry: Place in an oven at 80–90°C for 10–15 minutes.
- If you don't use the whole can of HIC at once, reseal the remaining HIC immediately. After opening the metal can three times, we recommend replacing the desiccant inside.
- Before using HIC, make sure the packaging is sealed, preferably with a desiccant inside. For customers with stricter requirements, we can provide aluminum foil bags for packaging after discussing their needs.
- Recommended usage tip: Keep a small oven (set at 75–90°C) on hand. Place the HIC you plan to use in the oven briefly to keep them warm and dry. This helps prevent moisture absorption during handling.

QUALITY

- **Quality testing method:**
Static Alternation Testing Method is the most frequently used method in testing the humidity sensitivity of HIC.
- **Quality standards:**
GJB2494-95 (Chinese standard)
MIL-I-8835A (American Military Packing)

ONE-STOP SOLUTION FOR SEMICONDUCTOR SAFE PACKAGING

Paired with WHS moisture barrier bags, desiccant packs, and vacuum sealing equipment, HICs complete a full moisture control packaging system, ensuring sensitive electronics are protected during storage and transport.



WHS Moisture Barrier Bags are designed to provide superior protection for wafers and other electronic components during transport and storage. These bags are engineered to shield against moisture, static electricity, and particle contamination, ensuring the safety and integrity of your valuable products.

WHS Desiccant Bags effectively reduce relative humidity (RH) inside sealed packaging to prevent oxidation, corrosion, and degradation of sensitive components. These desiccant solutions meet the highest industry standards for cleanroom environments and semiconductor handling.

The WHS Vacuum Sealer is a high-capacity vacuum sealer designed for demanding industrial applications. Featuring dual hot wires on both sealing bars, with working stage robust stainless-steel construction, it ensures airtight protection for moisture-sensitive products. The Vacuum Sealer is available in 350mm, 600mm and 1000mm sizes and is ideal for heavy-duty operations requiring precision and scalability.

