Humidity Indicator Cards

Made in the
United States of America

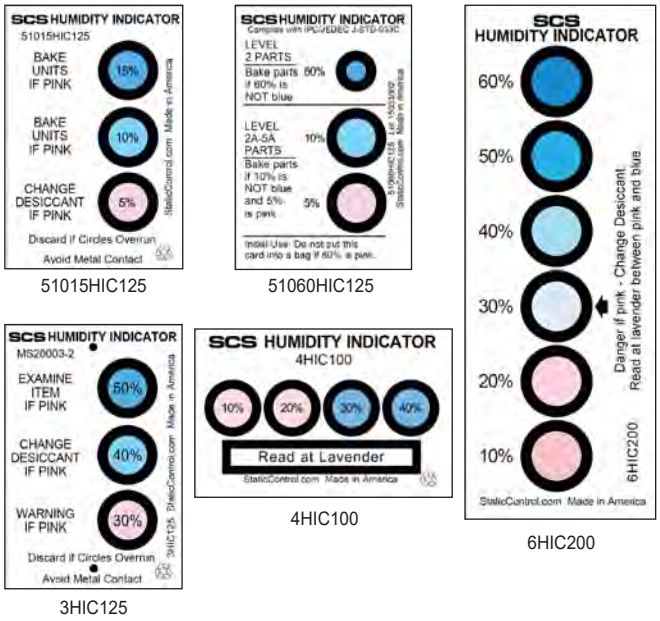

Figure 1. Humidity Indicator Cards

Description

An integral part of a complete moisture barrier packaging assembly is the Humidity Indicator Card. High relative humidity can cause significant, possibly irreparable damage to sensitive equipment, supplies, and products. To ensure dehydration measures work, humidity indicator cards measure the relative humidity (RH) inside sealed packages to allow immediate visual inspection of whether it has sustained unsafe humidity levels.

The Monitor Card contains chemically impregnated, humidity sensitive, indicating spots that will change color with moisture. The comparison bar is used to determine relative humidity of air. Select the indicating spot that most closely matches the color of the comparison bar. The measured relative humidity is the percentage indicated on the matching spot. The chemical reaction of the indicating spots is completely reversible; the spots will continue to change color as the moisture levels change.

Humidity Monitor cards are sold in cans. Humidity Indicator Cards should be inserted and sealed within an Moisture Barrier Bag with the desiccant packs.

Item	Std. package	Relative Humidity
3HIC125	125 cards/can	30/40/50
4HIC100	100 cards/can	10/20/30/40
6HIC200	200 cards/can	10/20/30/40/50/60
51060HIC125	125 cards/can	5/10/15
51015HIC125	125 cards/can	5/10/60

Our Humidity Indicator Cards meet the requirements of MIL-I-8835 and IPC/JEDEC J-STD-033C.

"Humidity Indicator Card (HIC) A card on which a moisture-sensitive chemical is printed such that it will change color from blue to pink when the indicated relative humidity is exceeded. This is packed inside the moisture-sensitive bag, along with the desiccant, to aid in determining the level of moisture to which the moisture-sensitive devices have been subjected." (IPC/JEDEC J-STD-033C Section 1.5.7)

Application

1. The humidity indicator spots will change from blue (dry condition) to pink (humidity condition) as the relative humidity changes in the volume of air surrounding the indicator.
2. Relative humidity is indicated at the lavender color.
3. Indicator spots will change within eight hours of being exposed to a change in relative humidity.
4. The humidity indicator spots are reversible, and the pink spots will change back to blue when the volume of air is dried, Humidity indicator cards with pink or lavender spots can be returned to a blue color by placing indicators in a sealed container with 33 grams (1 unit) of desiccant for four hours, However, we do not recommend reversing or using cards that have been exposed to high humidity in excess of 60%.
5. The highest humidity indicator spot should be blue before being put into use.
6. The humidity indicator will be at its most accurate at a temperature of 23°C (73°F).
7. Avoid contact with indicator spots. Wash any irritated areas with clean water.

Storage

1. Store humidity indicators in original sealed container with desiccant when possible before using, verify that indicator spots have not changed color.
2. Replace desiccant bad after three openings of container.
3. Store in dry, cool area.
4. Keep indicators our of direct sunlight.
5. Keep humidity indicators away from water or steam.
6. Ammonia gasses will damage humidity indicators.

RoHS 3, REACH, and Conflict Minerals Statement
See the Desco Industries RoHS 3, REACH, and Conflict Minerals Statement:

Desco Industries Limited Warranty
See the Desco Industries Limited Warranty:

Sufficient Information for Safe Use

This document has been prepared in order to provide sufficient information for safe use of the product.

FIRST AID MEASURES

Description of first aid measures

Eye Contact	Flush with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash with soap and water. If skin irritation occurs: Get medical advice/ attention.
Ingestion	No need for first aid is anticipated.
Inhalation	The substance is in a form that cannot be inhaled. No need for first aid is anticipated.

HANDLING AND STORAGE

Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

Conditions for safe storage, including any incompatibilities

Keep in a dry place.

EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters

Hazardous Ingredients	CAS No.	Value Type (Form of exposure)	Control parameters/ Permissible concentration	Basis
Cobalt Dichloride Hexahydrate	7791-13-1	TWA	0.02 mg/m3 (Cobalt)	ACGIH

Exposure controls

- **Individual protection measures**

Eye/Face Protection	Not required
Skin/Hand Protection	Not required
Respiratory Protection	Not required

OTHER INFORMATION

DII non-chemical products meet the definition of "article" under Occupational Safety and Health Administration (OSHA) 29 CRF 1910.1200(c) and Article 4(8) and Section 2.1 of Annex I of Classification, Labeling and Packaging (CLP) Regulation for not providing Safety Data Sheet (SDS).

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use.

NOTE: For EU-based downstream user, please contact your national REACH helpdesk if you have further questions on this topic.
Revision Date: 2018-01-18