

## COBALT-DICHLORIDE FREE HUMIDITY INDICATOR CARDS

Cards provide electronic and semiconductor manufacturers with a JEDEC-compliant humidity indicator card that is free of Cobalt-Dichloride, a chemical regulated under European Chemical Bureau (ECB) REACH directives.

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. The 2" x 3" blotting paper cards indicate relative humidity. Humidity Indicator Cards should be inserted and sealed within an Moisture Barrier Bag with the desiccant packs.

Item#	Unit Size	Std. Package	Relative Humidity
<a href="#">13858</a>	2" x 3" Card	125 pieces / can	5/10/15
<a href="#">13859</a>	2" x 3" Card	125 pieces / can	5/10/60
<a href="#">13860</a>	2" x 3" Card	100 pieces / can	10/20/30/40
<a href="#">13861</a>	1.56" x 4.75" Card	200 pieces / can	10/20/30/40/50/60

The [13858](#), [13859](#), [13860](#) and [13861](#) humidity indicator cards meet the requirements of MIL-I-8835 and IPC/JEDEC J-STD-033A.

"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-033A section 1.5.7)



Made in the  
United States of America

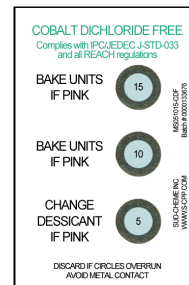
# DESCO

## Application

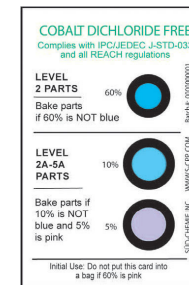
1. The humidity indicator spots will change from blue (dry condition) to pink (humid condition) as the relative humidity changes in the volume of air surrounding the indicator.
2. Relative humidity is indicated at the lavender color.
3. Indicator spots will change within eight hours of being exposed 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.

## Handling

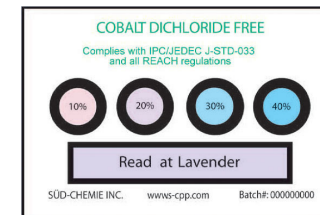
1. Store humidity indicators in original sealed container with desiccant when possible before using, verify that indicator spots have not changed color
2. Replace desiccant bag after three openings of container.
3. Store in dry, cool area.
4. Keep indicators out of direct sunlight.
5. Keep humidity indicators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



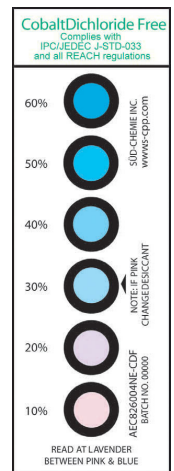
13858



13859



13860



13861

Specifications and procedures subject to change without notice.

## COBALT-DICHLORIDE FREE HUMIDITY INDICATOR CARDS

DESCO WEST: 3651 WALNUT AVE., CHINO, CA 91710 WEB SITE: [Desco.com](http://Desco.com)  
PHONE (909) 627-8178 FAX (909) 627-7449  
DESCO EAST: ONE COLGATE WAY, CANTON, MA 02021-1407  
PHONE (781) 821-8370 FAX (781) 575-0172

DRAWING  
NUMBER  
13859

DATE:  
November  
2011