

**Material Safety Data Sheet**  
**5-10-15% Humidity Indicator Card**

**Section I-Product Identification**

Manufacturer's Name: Desiccare, Inc.  
Avenida del Aguila Azteca 19190  
Parque Industrial Bajamaq El Aguila  
Tijuana, BC Mexico 22576

Emergency Telephone #: (909) 444-8272, (601) 932-0405

Chemical Name and Synonyms: MIL-I-8835

Trade Name and Synonyms: Humidity Indicator Card

Formula: Blotting Paper containing  $\text{CoCl}_2$

**Section II-Composition/information on Ingredients**

| Component Name      | Codes      | Concentration |
|---------------------|------------|---------------|
| 1. Blotting Paper   | MIL-D-8835 | >99.75%       |
| 2. Cobalt Chloride* | 7646-79-9  | <0.10%        |

\*EC Directive 98/98/EC requires that cobalt chloride concentrations greater than or equal to 0.01% and less than 1% have an R-49/T label: "may cause cancer by inhalation" and be shown with a skull and crossbones. This requirement does not apply to indicator cards since the cobalt chloride is in a form that cannot be inhaled.

**USA ACGIH 1994/95 Exposure Controls**

Cobalt, inorganic compounds - 0.02 mg/m<sup>3</sup> Co, 8 hour TWA

Cobalt and its compounds have been shown to cause cancer in laboratory animals. The threshold limit value (TLV) is 0.01 mg/m<sup>3</sup>.

**Section III-Hazard Identification**

Main Hazards of Cobalt Chloride: Potential skin and respiratory irritant

**Ordinary Handling of the HIC Card is not hazardous** when the following cautions are met: When handling the card, avoid holding the card by the cobalt spot, do not scrape the cobalt from the surface of the card to cause dusting. Note, cobalt chloride can be solubilized by touching with hands that are perspiring. Some individuals may be sensitive to this material and develop a skin irritation. The degree of irritation depends on the length of contact with the skin and skin sensitivity to the material.

#### Section IV-First Aid

- First Aid - Skin: Wash hands with water.
- First Aid - Eyes: Flush eyes with water, obtain medical help
- First Aid - Ingestion: Do not induce vomiting, wash out mouth with water. Drink 1 or 2 glasses of water (or milk).
- First Aid - Inhalation: Remove from the source of exposure. Obtain medical attention if symptoms develop.

#### Section V-Fire and Explosion Hazard Data

**Fire Fighting:** Dry chemical, water spray or foam

**Flash Point:** Cobalt Chloride is Non-flammable

**Fire hazard:** Blotting Paper is a fire hazard when exposed to flames

#### Section VI-Accidental Release Measures

Not applicable

Dropping HIC cards on wet floors, the cobalt chloride will be solubilized. Sweep up and discard the cards, soak up the water with a paper towel and discard.

**Personal Precautions:** Wear rubber gloves or wash hands immediately after

**Environmental Precautions:** Cobalt Chloride is a List II substance in the EEC Directive 76/464 for control of dangerous substances into the aquatic environment.

**The amount of cobalt chloride on a few Humidity Indicating Cards is negligible (<3 mg per card). Check country local rules and regulations for disposal.**

#### Section VII-Handling and Storage

Keep container closed and store with desiccant.

#### Section VIII-Exposure Controls/Personal Protection

##### USA ACGIH 1994/95 Exposure Controls

Cobalt, inorganic compounds - 0.02 mg/m<sup>3</sup> Co, 8 hour TWA

Personal Protection when handling cards is normally not required. Avoid skin contact with the colored spot. Note, the cobalt chloride is impregnated within the fibers of the blotting paper.

**No dust is possible unless the surface of the card is being abraded.**

#### Section IX-Physical and Chemical Properties

|                     |  |
|---------------------|--|
| Physical State:     | Dry, Impregnated within blotting paper fibers, non-dusting |
| Color:              | Blue spot on white card                                    |
| Odor:               | None   |
| Melting Point (°C)  | Cobalt Chloride (735°C)                                    |
| Flash Point (°C)    | Not Applicable   |
| Explosion (°C)      | Not Applicable   |
| Solubility in Water | 53g/100 ml (Cobalt Chloride in water)                      |
| Combustible         | Blotting Paper Burns with flame                            |

#### Section X-Stability and Reactivity

|                          |                   |
|--------------------------|-------------------|
| Stability:               | Considered stable |
| Conditions to Avoid:     | None known        |
| Materials to Avoid:      | None known        |
| Hazardous Decomposition: | None known        |

### Section XI-Toxicological Information

Acute Toxicity: Oral LD50 (rat) values 766 mg/kg have been reported for cobalt chloride.

Health Effects: May cause mild skin irritation in some individuals  
**IARC Assessment:** There is limited evidence for the carcinogenicity of cobalt (ii) chloride in experimental animals.

### Section XII, XIII-Ecological Information/ Disposal

Cobalt Chloride is a List II substance in the EEC Directive 76/464 for control of dangerous substances into the aquatic environment.

**The amount of cobalt chloride on a few Humidity Indicating Cards is negligible (<3 mg per card). Check country local rules and regulations for disposal.**

### Section XIV-Transport

UN Class: **This product is not classified as dangerous goods under the United Nations Transport Recommendations.**

### Section XV-Other Information

The European Council Directive 98/98/EC has established new rules regarding the classification, packaging, and labeling of cobalt chloride if it is in a form that can dust and be inhaled. The EC experts decided that **cobalt chloride** if in the form that can dust or be inhaled in concentrations greater than or equal to 0.01%, but less than 1% must contain an R-49/T label: "may cause cancer by inhalation," and be shown with a skull and crossbones.

Desiccare's Indicator Cards fall within the concentration mentioned above, however the EC Directive rules do not apply to Desiccare's Indicator Cards since the cobalt chloride on the spots on the cards are not in the form that could be inhaled.

Desiccare's Indicator Cards are non-hazardous and safe when used in the manner for which they were manufactured. Desiccare does not recommend attempting to inhale or ingest our indicator card products.