

# MATERIAL SAFETY DATA SHEET



**Date Issued:** 05/10/2001  
**MSDS No:** 9001  
**Date-Revised:** 08/03/2007  
**Revision No:** 2

## Reversible Humidity Indicator

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Reversible Humidity Indicator  
**GENERAL USE:** Humidity indicator.  
**ALTERNATE TRADE NAME(S):** Reversible Humidity Indicator II

#### MANUFACTURER

Süd-Chemie Performance Packaging  
 926 South 8th Street  
 Colton CA 92324  
**Service Number:** 800-966-1793

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC :** (800) 424 - 9300  
**Outside the U.S. Call Collect :** 001 (703) 527-3887

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Paper treated with chemical indicator(s).

**IMMEDIATE CONCERNS:** May cause allergic reaction.

#### POTENTIAL HEALTH EFFECTS

**EYES:** Route of exposure unlikely. Rubbing eyes after handling product may cause irritation. Use of proper chemical hygiene should prevent exposure.

**SKIN:** No adverse effects expected. Sensitive individuals may develop irritation or allergic reaction.

**INGESTION:** Route of exposure unlikely. Ingestion of large quantities may cause toxic effects.

**INHALATION:** Route of exposure unlikely.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Irritation

**SKIN:** Irritation, rash.

**INGESTION:** Cramping, upset stomach, vomiting, diarrhea, sensation of hotness.

**ROUTES OF ENTRY:** Eyes, skin

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS	% BY WEIGHT
Cobalt (II) Chloride	7646-79-9	<5
Ink		<1

See Section 8 for Exposure Limits

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** Normally not needed. If large quantities are ingested, call your local Poison Control Center (1-800-222-1222 in the U.S.).

**NOTES TO PHYSICIAN:** Chronic ingestion may cause blood abnormalities (polycythemia), increased clotting time, hyperplasia of the bone marrow and thyroid gland, cardiomyopathy, and damage to the pancreas in sensitive individuals.

**5. FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use extinguishing agent applicable to surrounding fire.

**FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus operated in pressure-demand mode, (NIOSH approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL:** No special precautions required.

**LARGE SPILL:** With shovel or scoop, place material into appropriate container.

**7. HANDLING AND STORAGE**

**HANDLING:** Use of proper hygiene practices in the workplace is recommended.

**STORAGE:** Store in a dry area.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE GUIDELINES**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Cobalt (II) Chloride	<b>TWA</b>	[1]	0.1 mg/m <sup>3</sup> [1]	[2]	0.02 mg/m <sup>3</sup> [2]
Ink	<b>TWA</b>	[3]	[3]	[3]	[3]
<b>OSHA TABLE COMMENTS:</b> 1. Metal dust and fume 2. as Co 3. Exposure limits not established.					

**ENGINEERING CONTROLS:** No special ventilation requirements.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Follow facility guidelines.

**SKIN:** Use of proper hygiene practices in the workplace is recommended.

**RESPIRATORY:** Follow facility guidelines.

**9. PHYSICAL AND CHEMICAL PROPERTIES****PHYSICAL STATE:** Solid**ODOR:** None**pH:** Not Determined**PERCENT VOLATILE:** None**MELTING POINT:** Not Determined**SOLUBILITY IN WATER:** Slightly soluble**DENSITY:** Not Determined**10. STABILITY AND REACTIVITY****STABLE:** Yes**HAZARDOUS POLYMERIZATION:** No**11. TOXICOLOGICAL INFORMATION****ACUTE**

Chemical Name	ORAL LD <sub>50</sub> (rat)
Cobalt (II) Chloride	80 mg/kg (rat)

**CARCINOGENICITY**

Chemical Name	NTP Status	IARC Status	OSHA Status
Cobalt (II) Chloride	Not listed.	Group 2B	Not listed.

**SENSITIZATION:** Cobalt and cobalt compounds have been shown to cause hypersensitivity including allergic skin and respiratory reactions. (Lewis, R.J. Sax's Dangerous Properties of Industrial Materials. New York, NY: Van Nostrand Reinhold)

**12. ECOLOGICAL INFORMATION****ECOTOXICOLOGICAL INFORMATION:**

Aquatic Toxicity (Cobalt (II) Chloride):

96-hr LC50 (R. hexadactyla) = 17,590 ug/L

96-hr LC50 (X. laevis) = 10,400 ug/L

48-hr LC50 (R. hexadactyla) = 25,990 ug/L

24-hr LC50 (R. hexadactyla) = 32,220 ug/L

48-hr EC50 (T. tubifex) = 447, 710 ug/L

96-hr LC50 (B. sowerbyi) = 132,620 ug/L

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** This product, if discarded as sold, is not a Federal RCRA hazardous waste. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not regulated

**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**313 REPORTABLE INGREDIENTS:** Contains component(s) subject to SARA reporting.

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt.%	CAS
Cobalt (II) Chloride	<5	7646-79-9

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** Not listed.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

**TSCA STATUS:** All components are listed on the TSCA Inventory or are excluded or exempt.

**CLEAN AIR ACT**

Chemical Name	Wt.%	CAS
Cobalt (II) Chloride	<5	7646-79-9

**REGULATIONS****STATE REGULATIONS** California

**CALIFORNIA PROPOSITION 65:** This product does not contain chemical(s) known to the state of California to cause cancer, birth defects, or reproductive harm.

**RCRA STATUS:** This product, if discarded as sold, is not a Federal RCRA hazardous waste. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

**CANADA****WHMIS HAZARD SYMBOL AND CLASSIFICATION**

D2A/D2B

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**CANADA INGREDIENT DISCLOSURE LIST:** Contains component(s) listed on the Canadian Hazardous Products Act Ingredient Disclosure List.

**CANADIAN ENVIRONMENTAL PROTECTION ACT:** All ingredients are listed on the Canadian Domestic Substances List inventory.

**16. OTHER INFORMATION**

**APPROVED BY:** Prepared and Approved by SHE Dept. Sud-Chemie Inc

**REVISION SUMMARY:** Revision #: 2 This MSDS replaces the August 16, 2004 MSDS. Any changes in information are as follows: In Section 1 Prepared By In Section 9 (Group Field) for pH (Group Field) for Percent Volatile In Section 11 IARC NTP OSHA Oral LD50 (Value) Oral LD50 (Unit) In Section 15 Fire Pressure Generating Reactivity Accute Chronic SARA 313 Reportable Ingredients WHMIS Class Clean Air Act 40 CFR

**MANUFACTURER DISCLAIMER:** The information presented herein is believed to be accurate but is not warranted. Recipients are advised to confirm in advance that the information is current, applicable and suitable to their circumstances.