

# MATERIAL SAFETY DATA SHEET



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MSDS No: 9001  
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Revision No: 3

## 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  
**Customer Service:** 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	Mixture	<1
Paper	9004-34-6	Balance

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**

**FLASHPOINT AND METHOD:** Not Applicable

**GENERAL HAZARD:** Material will burn in a fire.

**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.

**SPECIAL PROTECTIVE EQUIPMENT:** Refer to Section 8, Exposure Control/Personal Protection.

**7. HANDLING AND STORAGE**

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

**STORAGE:** Keep container tightly closed when not in use. Product may absorb moisture from air. Keep container dry.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE GUIDELINES**

HAZARDOUS COMPONENTS					
		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

**COLOR:** Blue to pink

**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	418 mg/kg (rat)

### CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Cobalt (II) Chloride	Not listed.	Group 2B	Not listed.
Ink	Not listed.	Not listed.	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 LC<sub>50</sub> (R. hexadactyla) = 17,590 ug/L

96-hr LC<sub>50</sub> (X. laevis) = 10,400 ug/L

48-hr LC<sub>50</sub> (R. hexadactyla) = 25,990 ug/L

24-hr LC<sub>50</sub> (R. hexadactyla) = 32,220 ug/L

48-hr EC<sub>50</sub> (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

#### AIR (ICAO/IATA)

**SHIPPING NAME:** Not regulated

#### VESSEL (IMO/IMDG)

**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.

### 16. OTHER INFORMATION

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

**REVISION SUMMARY:** Revision #: 3. This MSDS replaces the July 13, 2010 MSDS., , , , Any changes in information are as follows: In Section 5: (Group Field) for Flash Point, General Hazards In Section 6: Special Protective Equipment In Section 7: Storage In Section 14: International (IMO /IMDG) - Proper Shipping Name, Air

(IATA /ICAO) - Proper Shipping Name In Section 15: WHMIS, CANADA Ingredient Disclosure List, CEPA

**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.

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