MATERIAL SAFETY DATA SHEET



Date Issued: 05/10/2001 MSDS No: 9001 Date-Revised: 07/13/2010

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		[H TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Cobalt (II) Chloride	TWA	[1]	0.1 mg/m3 ^[1]	[2]	0.02 mg/m3 ^[2]
Ink	TWA	[3]	[3]	[3]	[3]

OSHA TABLE COMMENTS:

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 ₅₀ (rat)
Cobalt (II) Chloride	418 mg/kg (rat)

CARCINOGENICITY

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

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 HazardsIn Section 6: Special Protective EquipmentIn Section 7: StorageIn Section 14: International (IMO /IMDG) - Proper Shipping Name, Air

(IATA /ICAO) - Proper Shipping NameIn 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.