SVHCs in articles and packaging

On 28th October 2008 the European Chemicals Agency (ECHA) based in Finland, issued details around legal obligations that companies may have resulting from the inclusion of substances on the so called "Candidate List".

These obligations are not only linked to the listed substances on their own or in preparations but also to their presence in articles.

Suppliers of articles which contain substances on the Candidate List in a concentration of >0.1% of the weight of the total article must inform their customers of the name of the substance and provide appropriate safe use data.

In general, packaging is regarded as a separate article to the item it contains. For example, the sealed bag a semiconductor is supplied in and, if included, a humidity indicator card should be considered separately. Likewise, anything to protect the semiconductor, such as a foam insert, is a separate article. The 0.1% threshold would apply to each individually.

Taking into account the above and the example used; an article's packaging would not need to be mentioned in relation to the article itself but would need to be mentioned separately, via the safety data.

Please refer to the following data sheet for details of any SVHC contained in the packaging of this product.

NATERIAL SAFETY DATA SHEET



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

Revision No: 2

Reversible Humid ty Indicator

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Reversit e Humidity Indicator

GENERAL USE: Humidity indicator.

ALTERNATE TRADE NAMP(S): Reversible Humidity Indicator II

MANUFACTURER

Süd-Chemie Performance Packaging

926 South 8th Street Colton CA 92324

Service Number: 800-9 6-1793

24 HR. EMERGENCY TELEPHONE NUMBERS

(800) 424 - 9300

Dutside the U.S. Call Collect: 001 (703) 527-3887

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANC E: Paper treated with chemical indicator(s).

IMMEDIATE CONCERNS: May cause allergic reaction.

POTENTIAL HEALTH EFFICTS

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

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

INGESTION: Route of e. posure unlikely. Ingestion of large quantities may cause toxic effects.

INHALATION: Route of exposure unlikely.

SIGNS AND SYMPTOMS (F 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

Reversible Humidity Indicator

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

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

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

INOTES 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

XTINGUISHING MEDIA: Use extinguishing agent applicable to surrounding fire.

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

6. ACCIDENTAL RELEASE MEASURES

MALL SPILL: No special precautions required.

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

7. HANDLING AND STORAGE

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

S ! TORAGE: Store in a dry area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

XPOSURE GUIDELINES

OSHA HAZA	ARDOUS COMPON	ENTS (2	9 CFR1910.1200)	
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m³	ppm	mg/m³
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.

Reversible Humidity Indicator

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 ₅₀ (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 hazar ous waste. Processing, use or contamination of this product may change the waste management options. State^d 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.º	6 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 Y: Prepared and Approved by SHE Dept. Sud-Chemie Inc

REVISION S JMMARY: 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.