



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Cobalt carbonate
PRODUCT NUMBER: 1256
CHEMICAL NAME: Cobalt carbonate
DATE PREPARED: 07-Jan-08

MANUFACTURER:

The Shepherd Chemical Company
4900 Beech Street
Cincinnati, Ohio 45212
(513)-731-1110 (voice), (513)-731-1532 (fax)

EMERGENCY TELEPHONE NO. 1-800-424-9300 CHEMTREC

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

<u>CHEMICAL INGREDIENT</u>	<u>C.A.S. NUMBER</u>	<u>% BY WEIGHT</u>	<u>% METAL</u>
Cobalt carbonate/hydroxide	*	99.7-99.9	45.5 Co min.
Nickel carbonate hydroxide	12607-70-4	0.1-0.3	0.05-0.15 Ni

* 513-79-1, 12602-23-2

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE: Reddish-purple powder **ODOR:** No odor

CAUTION! AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING DUST. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION.

POTENTIAL HEALTH EFFECTS, TARGET ORGAN EFFECTS (ACUTE AND CHRONIC)

This product may cause eye, skin and upper respiratory tract irritation. Overexposure to cobalt compounds may cause respiratory sensitization and an allergic skin rash. They are mildly irritating to the eyes and if swallowed, may cause vomiting, diarrhea and a sensation of hotness.

CARCINOGENICITY: IARC states that cobalt compounds are possibly carcinogenic to humans (Group 2B) and nickel compounds are carcinogenic to humans (Group 1).

SECTION 4 - FIRST AID MEASURES

If inhaled or ingested, call a physician. In case of contact, flush eyes with plenty of water for at least 15 minutes. Call a physician. Flush skin with water.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT/METHOD: N/A

FLAMMABLE LIMITS: LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: Water

SPECIAL FIREFIGHTING PROCEDURES: Use Self-Contained Breathing-Apparatus.

FIRE AND EXPLOSION HAZARD:

N/A

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Ventilate area of spill. Avoid generating dust. Collect material into appropriate containers for reuse or disposal.

SECTION 7- HANDLING AND STORAGE

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling. Store in closed containers. Avoid generating dust.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators if OSHA PEL is exceeded.

SKIN PROTECTION: Use impervious glove and body-covering clothing.

EYE PROTECTION: Use side-shielded safety glasses or goggles.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation.

EXPOSURE GUIDELINES:

<u>CHEMICAL INGREDIENT</u>	<u>OSHA PEL (mg/M3)</u>	<u>ACGIH TLV (mg/M3)</u>
Cobalt carbonate/hydroxide	0.1 Co	0.02 Co
Nickel carbonate hydroxide	1.0 Ni	0.2 Ni

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Reddish-purple powder

ODOR: No odor

BOILING POINT: N/A

VAPOR PRESSURE (mm HG): N/A

VAPOR DENSITY (Air = 1): N/A

SOLUBILITY IN WATER: N/A

SPECIFIC GRAVITY / DENSITY: 4.13

FREEZING POINT: N/A

pH: N/A

EVAPORATION RATE: N/A

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: This product is stable. Hazardous polymerization will not occur.

INCOMPATIBILITY: N/A

HAZARDOUS DECOMPOSITION BY PRODUCTS:

N/A

SECTION 11- TOXICOLOGICAL INFORMATION

oral rat LD50: 640 mg/kg

SECTION 12- ECOLOGICAL INFORMATION

Not Available

SECTION 13 - DISPOSAL CONSIDERATION

Dispose in closed containers, at an approved landfill, in accordance with local, state and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

This product is not regulated for transportation.

(Chemical, n.o.i.)

SECTION 15 - REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD:

Hazardous due to target organ effects (See Section 3)

CERCLA/SUPERFUND:

N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

Section 311/312 Hazard Categories: Acute and Chronic Health Hazard

Section 313- This product contains the following substances subject to 313 reporting:

Cobalt comp. 99.7-99.9%

Nickel comp. 0.1-0.3%

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All components of this product are on the TSCA Inventory unless otherwise noted in Section 2.

INTERNATIONAL REGULATIONS:

All components are registered in Canada (DSL), China (IECSC), Europe (EINECS), Korea (KECI), New Zealand (ERMA) and Philippines (PICCS).

SECTION 16 - OTHER INFORMATION

REFERENCES:

Occupational Health Guidelines for Chemical Hazards, JAN. 1981, NIOSH/OSHA

Occupational Diseases - A Guide to their Recognition, JUNE 1977, NIOSH

Criteria for Controlling Occupational Exposure to Cobalt, OCT. 1981, NIOSH

HMIS RATING:

Health - 2*

Flammability - 0

Reactivity - 0

Personal Protection - E

DISCLAIMER:

ALTHOUGH THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN (HEREINAFTER "INFORMATION") ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE CORRECT AS OF THE DATE HEREOF, THE SHEPHERD CHEMICAL COMPANY MAKES NO REPRESENTATIONS AS TO THE COMPLETENESS OR ACCURACY THEREOF. INFORMATION IS SUPPLIED UPON THE CONDITION THAT THE PERSONS RECEIVING SAME WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR PURPOSES PRIOR TO USE. IN NO EVENT WILL THE SHEPHERD CHEMICAL COMPANY BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.