

Cobalt(II) Chloride, Hexahydrate, GR

**Material Safety Data Sheet**

**Section 1. Product and Company Identification**

**Product Name** Cobalt(II) Chloride, Hexahydrate, GR **Product Code** CX1800

**Manufacturer** EMD Chemicals Inc.  
P.O. Box 70  
480 Democrat Road  
Gibbstown, NJ 08027  
Prior to January 1, 2003 EMD Chemicals Inc. was  
EM Industries, Inc. or EM Science, Division of  
EM Industries, Inc.

**Effective Date** 3/3/2003

**For More Information Call** 856-423-6300 Technical Service  
Monday-Friday: 8:00 AM - 5:00 PM

**In Case of Emergency Call** 800-424-9300 CHEMTREC  
(USA)  
613-996-6666 CANUTEC  
(Canada)  
24 Hours/Day: 7 Days/Week

**Synonym** COBALT(II) CHLORIDE HEXAHYDRATE

**Material Uses** Analytical reagent.

**Chemical Family** Metal salt.

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**Section 2. Composition and Information on Ingredients**

<b>Component</b>	<b>CAS #</b>	<b>% by Weight</b>
COBALT (OUS) CHLORIDE	7791-13-1	100

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**Section 3. Hazards Identification**

**Physical State and Appearance** Solid. (Crystals solid.)

**Emergency Overview** WARNING!  
HARMFUL IF INHALED OR SWALLOWED.  
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
POSSIBLE CANCER HAZARD.  
MAY CAUSE CANCER BASED ON ANIMAL DATA.

**Routes of Entry** Inhalation. Ingestion.

**Potential Acute Health Effects**

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Skin** Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation** Hazardous in case of inhalation (lung irritant).

**Ingestion** Hazardous in case of ingestion.

**Potential Chronic Health Effects**

**Carcinogenic Effects** Classified A3 (Proven for animal.) by ACGIH.

**Medical Conditions Aggravated by** Additional information See Toxicological Information (section 11)  
Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**Overexposure:**

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**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

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**Section 5. Fire Fighting Measures**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	<b>Risks of explosion of the product in presence of static discharge:</b> No. <b>Risks of explosion of the product in presence of mechanical impact:</b> No.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Protective Clothing (Fire)</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

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**Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
<b>Large Spill and Leak</b>	Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface

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and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Spill Kit Information

No specific spill kit required for this product.

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### Section 7. Handling and Storage

#### Handling

Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing dust. Keep container closed.

#### Storage

Keep container in a cool, well-ventilated area.

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### Section 8. Exposure Controls/Personal Protection

#### Engineering Controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### Personal Protection

**Eyes** Splash goggles.

**Body** Lab coat.

**Respiratory** Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Hands** Gloves.

**Feet** Not applicable.

#### Protective Clothing

#### (Pictograms)

#### Personal Protection

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A

#### in Case of a Large

spill self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

#### Spill

#### Product Name

COBALT (OUS) CHLORIDE

#### Exposure Limits

**SUVA (Switzerland, 1997). Sensitizer skin, Sensitizer inhalation**

MAK: 0.1 mg/m<sup>3</sup>

**DK–Arbejdstylsinet (Denmark, 1996).**

GV: 0.02 mg/m<sup>3</sup>

**Tyterveyslaitos (Finland, 1998).**

TWA: 0.05 mg/m<sup>3</sup>

**National Authority for Occupational Safety/Health (Ireland, 1999).**

OEL: 0.1 mg/m<sup>3</sup>

**N–Arbejdstylsinet (Norway, 1996). Sensitizer skin, Sensitizer inhalation**

AN: 0.05 mg/m<sup>3</sup>

**AFS (Sweden, 1996).**

NGV: 0.05 mg/m<sup>3</sup>

**EH40–MEL (United Kingdom (UK), 1997).**

TWA: 0.1 mg/m<sup>3</sup>

**ACGIH (United States, 1994).**

TWA: 0.02 mg/m<sup>3</sup> Form: Inorganic

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### Section 9. Physical and Chemical Properties

<b>Odor</b>	Not available.
<b>Color</b>	Red.
<b>Physical State and Appearance</b>	Solid. (Crystals solid.)
<b>Molecular Weight</b>	237.95 g/mole
<b>Molecular Formula</b>	Cl <sub>2</sub> Co . 6H <sub>2</sub> O
<b>pH</b>	Not available.
<b>Boiling/Condensation Point</b>	Not available.
<b>Melting/Freezing Point</b>	Not available.
<b>Specific Gravity</b>	Not available.
<b>Vapor Pressure</b>	Not available.
<b>Vapor Density</b>	Not available.
<b>Odor Threshold</b>	Not available.
<b>Evaporation Rate</b>	Not available.
<b>LogKow</b>	Not available.
<b>Solubility</b>	Soluble in water.

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### Section 10. Stability and Reactivity

<b>Stability and Reactivity</b>	The product is stable.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with Various Substances</b>	Not available.
<b>Rem/Incompatibility</b>	Not available.
<b>Hazardous Decomposition Products</b>	Chlorine.
<b>Hazardous Polymerization</b>	Will not occur.

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### Section 11. Toxicological Information

<b>RTECS Number:</b>	Cobalt(II) Chloride, Hexahydrate, GR GG0200000
<b>Toxicity</b>	Acute oral toxicity (LD50): 766 mg/kg [Rat].
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified A3 (Proven for animal.) by ACGIH.
<b>Acute Effects on Humans</b>	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation (lung irritant). Hazardous in case of ingestion.
<b>Synergetic Products (Toxicologically)</b>	Not available.
<b>Irritancy</b>	Draize Test: Not available.
<b>Sensitization</b>	Not available.

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<b>Carcinogenic Effects</b>	Classified A3 (Proven for animal.) by ACGIH.
<b>Toxicity to Reproductive System</b>	Tests on laboratory animals for reproductive effects are cited in Registry of Toxic Effects on Chemical Substances (RTECS).
<b>Teratogenic Effects</b>	Not available.
<b>Mutagenic Effects</b>	Tests on laboratory animals for mutagenic effects are cited in Registry of Toxic Effects of Chemical Substances (RTECS).

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### Section 12. Ecological Information

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are as toxic as the product itself.

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### Section 13. Disposal Considerations

<b>EPA Waste Number</b>	Not available.
<b>Treatment</b>	Material does not have an EPA Waste Number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

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### Section 14. Transport Information

<b>DOT Classification</b>	Proper Shipping Name: CHEMICALS, N.O.S. RQ: Not applicable.
<b>TDG Classification</b>	Not available.
<b>IMO/IMDG Classification</b>	Proper Shipping Name: CHEMICALS, N.O.S. RQ: Not applicable.
<b>ICAO/IATA Classification</b>	Proper Shipping Name: CHEMICALS, N.O.S. RQ: Not applicable.

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### Section 15. Regulatory Information

<b>U.S. Federal Regulations</b>	TSCA 8(b) inventory: COBALT (OUS) CHLORIDE  SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: COBALT (OUS) CHLORIDE SARA 311/312 MSDS distribution – chemical inventory – hazard identification: COBALT (OUS) CHLORIDE: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard SARA 313 toxic chemical notification and release reporting: No products were found.
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Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

**WHMIS (Canada)** Class D-2B: Material causing other toxic effects (TOXIC).

No products were found.

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

### International Regulations

**EINECS** Not available.

**DSCL (EEC)** R22- Harmful if swallowed.

R37/38- Irritating to respiratory system and skin.

R41- Risk of serious damage to eyes.

**International Lists** Australia (NICNAS): COBALT (OUS) CHLORIDE

Japan (MITI): COBALT (OUS) CHLORIDE

Philippines (RA6969): COBALT (OUS) CHLORIDE

China: No products were found.

**State Regulations** No products were found.

California prop. 65: No products were found.

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### Section 16. Other Information

<b>National Fire Protection Association (U.S.A.)</b>	<b>0</b>	<b>Fire Hazard</b>
	<b>20</b>	<b>Health</b>
		<b>Reactivity</b>
		<b>Specific Hazard</b>

**Changed Since Last Revision** +

#### Notice to Reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

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