Cobalt Chloride, 6-Hydrate



Section 1

Product Description

Product Name:Cobalt Chloride, 6-Hydrate
Recommended Use:
Science education applications

Synonyms: Cobalt (II) cloride, hexahydrate: cobalt dichloride

Distributor: Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;











DANGER



Toxic if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause cancer. Very toxic to aquatic life.

GHS Classification:

Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1, Skin Sensitisation Category 1, Carcinogenicity Category 1B, Reproductive Toxicity Category 1B, Hazardous to the aquatic environment - Acute Category 1, Acute Toxicity - Oral Category 3, Acute Toxicity - Dermal Category 5

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3

Composition / Information on Ingredients

<u>Chemical Name</u> Cobalt (II) Chloride, 6-hydrate **CAS #** 7791-13-1 <u>%</u> 100

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

Skin Contact: IF ON SKIN: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated

clothing. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all

contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical

advice/attention.

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

Section 5

Firefighting Procedures

Extinguishing Media:

Use media suitable to extinguish surrounding fire.

Fire Fighting Methods and Protection:

Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards:

Hazardous Combustion Products:

Carbon dioxide, Carbon monoxide, Hydrogen chloride

Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is

Released or Spilled:

Avoid the generation of dusts during clean-up.

Environmental Precautions:

Do not allow the spilled product to enter public drainage system or open waterways. Prevent the spread of any spill to minimize harm to human health and the environment if safe

to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Collect spillage.

Section 7

Handling and Storage

Handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective

equipment as required. Store in a secure area suitable for toxic material. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code:

Storage:

White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8

Protection Information

	<u>ACGIH</u>		<u>OSHA PEL</u>	
Chemical Name	<u>(TWA)</u>	(STEL)	<u>(TWA)</u>	(STEL)
Cobalt (II) Chloride, 6-hydrate	0.02 mg/m3 TWA (as	N/A	N/A	N/A
	Col			

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when

handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE):

Respiratory Protection:

Lab coat, apron, eye wash, safety shower.

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a

respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Respirator Type(s): NIOSH approved air purifying respirator with dust/mist filter. **Eve Protection:** Wear safety glasses with side shields and a Face shield

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work. Nitrile

Gloves:

Physical Data

Section 9

Formula: CoCl2 * 6H20

Molecular Weight: 237.93 g/mol

Appearance:

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting Point: No data available Boiling Point: No data available Flash Point: No data available Flammable Limits in Air: N/A

Vapor Pressure: 40 mmHg at 770 °C Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A Specific Gravity: 1.92

Solubility in Water: Slightly Soluble Log Pow (calculated): No data available Autoignition Temperature: No data available **Decomposition Temperature:** No data available

Viscosity: No data available

Percent Volatile by Volume: 0% (21 °C)

Section 10 Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Hazardous Decomposition Products: Hydrogen chloride, Carbon dioxide, Carbon monoxide

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Inhalation, ingestion, eye or skin contact.

Symptoms (Acute): Respiratory disorders
Delayed Effects: No data available

Acute Toxicity:

Chemical NameCAS NumberOral LD50Dermal LD50Inhalation LC50Cobalt (II) Chloride, 6-hydrate7791-13-1Oral LD50Dermal LD50 RatNot determined

GUINEA PIG 55 > 2000 mg/kg

mg/kg

Oral LD50 Mouse

80 mg/kg

Oral LD50 Rat 766

mg/kg

Carcinogenicity:

Chemical Name CAS Number IARC NTP OSHA

Cobalt (II) Chloride, 6-hydrate 7791-13-1 Listed Not listed Listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: No evidence of a teratogenic effect (birth defect).

Sensitization: Evidence of a sensitization effect.

Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2

Chronic: Tests on laboratory animals indicate material may produce adverse mutagenic and reproductive effects.,

Mutation data cited., Reproductive data cited., Tumorigenic data cited.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No dataOther Adverse Effects:No data

Chemical NameCAS NumberEco ToxicityCobalt (II) Chloride, 6-hydrate7791-13-1Not available

Aquatic EC50 (48h) Daphnia = 1.1 - 1.6 MG/L

Aquatic EC50 (48h)

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name:

N/A

Air - IATA Proper Shipping Name:

UN number: 3077 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Cobalt dichloride hexahydrate)

Section 15	Regulatory Information

TSCA Status: A component (or components) of this product is not listed on the TSCA Inventory of

Existing Chemical Substances. Product is for research and development use only.

Chemical Name CAS § 313 Name § 304 RQ CERCLA RQ § 302 TPQ CAA 112(2)

Number TQ

No data available 7791-13-1 No No No No No

California Prop 65:



WARNING: Cancer and Reproductive Harm -

www.P65Warnings.ca.gov

Section 16 Additional Information

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health