An ISO9001 Certified Company

Material Safety Data Sheet
Cobaltous Chloride, 1.2%

Section 1 - Chemical Product and Company Identification

MSDS Name:
Cobaltous Chloride, 1.2%
Catalog Numbers:
LC13200
Synonyms:
Cobalt chloride solution
Company Identification:
LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number:
(412) 826-5230
Emergency Phone Number:
(800) 424-9300
CHEMTREC Phone Number:
(800) 424-9300 or
011-703-527-3887

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	>94
7647-01-0	Hydrochloric acid	<4
7791-13-1	Cobalt (II) Chloride Hexahydrate	1.2

Section 3 - Hazards Identification

Emergency Overview

Appearance: *clear, pink solution*

Danger! *Corrosive. Causes burns by all exposure routes. May cause cancer based on animal studies. May cause allergic skin and respiratory reactions. May cause heart, liver and kidney damage. May impair fertility.*

Target Organs: *eyes, skin, respiratory, reproductive and gastrointestinal systems, liver, kidneys, blood, heart*

Potential Health Effects

Eye:
Causes burns to the eyes.
Skin:
Causes burns to the skin. May cause allergic skin reaction

Ingestion:
May cause burns to the gastrointestinal tract, nausea, vomiting and diarrhea. May cause liver, kidney, and heart damage.

Inhalation:
Causes respiratory tract burns. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.

Chronic:
May cause cancer based on animal studies. Tumorigenic effects have occurred in laboratory animals. Reproductive toxicity effects have occurred in laboratory animals. May cause adverse liver, kidney, and cardiac effects. May cause blood abnormalities.

Section 4 - First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once.

Ingestion:
Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:
Move victim to fresh air immediately. If breathing is difficult, administer oxygen. Give artificial respiration if necessary. Get medical aid at once.

Notes to Physician:
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Contact with metals may evolve flammable hydrogen gas.

Extinguishing Media:
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:
No information found.

Flash Point:
No information found.

NFPA Rating:
Health- 3, Flammability- 0, Instability- 0.

Explosion Limits:
Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal. Label reclaimed spill material as corrosive. Material may be carefully neutralized to pH 7 with sodium bicarbonate.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not ingest or inhale. Do not get in eyes, on skin, or on clothing. Use with adequate ventilation.

Storage:

Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Cobalt (II) Chloride hexahydrate	None of the components are on this list	None of the components are on this list	None of the components are on this list
Hydrochloric acid	2 ppm Ceiling	5 ppm Ceiling 7 mg/m3 Ceiling 50 ppm IDLH	5 ppm Ceiling 7 mg/m3 Ceiling
Water	None of the components are on this list	None of the components are on this list	None of the components are on this list

OSHA Vacated PELs:

Hydrochloric acid: 5 ppm Ceiling; 7 mg/m3 Ceiling

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

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Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Pink
Odor:	None reported
pH:	Acidic
Vapor Pressure:	No information found.
Vapor Density:	No information found.
Evaporation Rate:	No information found.
Viscosity:	No information found.
Boiling Point:	No information found.
Freezing/Melting Point:	No information found.
Decomposition Temperature:	No information found.
Solubility in water:	Soluble
Specific Gravity/Density:	1.0-1.1
Molecular Formula:	No information found.
Molecular Weight:	No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, excess heat.

Incompatibilities with Other Materials:

Strong oxidizers, metals, bases, reducing agents.

Hazardous Decomposition Products:

Hydrogen chloride.

Hazardous Polymerization:

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000
CAS# 7647-01-0: MW4025000
CAS# 7791-13-1: GG0200000

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg
CAS# 7647-01-0:
Oral, rat: LD50 = 700 mg/kg
Dermal, rat: LD50 = 5010 mg/kg
Inhalation, rat: 3124 ppm/1H
CAS# 7791-13-1:
Oral, rat: LD50 = 766 mg/kg
Dermal, rat: LD50 = 2 g/kg

Carcinogenicity:
CAS# 7791-13-1: Listed as a carcinogen by IARC and OSHA.
Epidemiology:
Tumorigenic effects have occurred in laboratory animals.
Teratogenicity:
Teratogenic effects have occurred in laboratory animals.
Reproductive:
Reproductive toxicity effects have occurred in laboratory animals.
Mutagenicity:
Mutagenic effects have occurred in laboratory animals.
Neurotoxicity:
No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name:	Hydrochloric acid solution
Hazard Class:	8
UN Number:	UN1789
Packing Group:	PG II

Section 15 - Regulatory Information

US Federal

TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 7647-01-0 is listed on the TSCA Inventory.
CAS# 7791-13-1 is not listed on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR 720.3(u)(2)).
SARA Reportable Quantities (RQ):
CAS# 7647-01-0: final RQ: 5000 lb. (2270 Kg)
CERCLA/SARA Section 313:
This material contains Hydrochloric acid (CAS# 7647-01-0, <4%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
OSHA - Highly Hazardous:
CAS# 7647-01-0 is considered highly hazardous by OSHA.

US State

State Right to Know:

CAS# 7647-01-0 is listed on the following state Right-to-Know lists: California, Massachusetts, Minnesota, New Jersey, and Pennsylvania.

California Regulations:

None

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 7647-01-0 is listed on Canada's DSL List.
CAS# 7791-13-1 is not listed on Canada's DSL or NDSL Lists.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 7647-01-0 is listed on Canada's Ingredient Disclosure List.
CAS# 7791-13-1 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: February 4, 1999
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