COBALTOUS CHLORIDE HEXAHYDRATE MSDS

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: COBALTOUS CHLORIDE HEXAHYDRATE
Manufacturer Name: FISHER SCIENTIFIC CO
Address:
52 FADEM RD
City: SPRINGFIELD
State: NJ
Zip: 07081-3116
Country: US
Business Phone: 201-379-1400
For information in North America, call: 201-379-1400
Health Phone: 201-796-7100
Manufacturer MSDS Creation Date:
03/15/1989

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Percent</th>
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<tbody>
<tr>
<td>COBALT CHLORIDE</td>
<td>7791-13-1</td>
<td>100</td>
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RTECS:
GGQ2000000
OSHA PEL TWA: 0.1 MG/M3 (CO)
ACGIH TLV TWA: 0.05 MG/M3 (CO)
ACGIH STEL/Ceiling: N/P
Comments:
Other REC Limits: NOT ESTABLISHED ; Ozone Depleting Chemical: N ;

SECTION 3: HAZARDS IDENTIFICATION

COBALT CHLORIDE:

Route of Exposure:
Inhalation: YES Skin: YES Ingestion: YES
Potential Health Effects:
ACUTE: INHALATION- DEATH, RHINITIS, IRRITATION OF RESPIRATORY SYSTEM, TRACHEITIS. EYES- IRRITATION. SKIN-IRRITATION, DERMATITIS. INGESTION- ABDOMINAL DISTRESS, NERVE DEAFNESS, DEATH. CHRONIC: ASTHMA, PNEUMONITIS, DERMATITIS. DAMAGE TO LIVER AND KIDNEYS.
Carcinogenicity:
NONE
OSHA Designation: NO
NTP Designation: NO
IARC Designation: NO
Signs/Symptoms:
INHALATION: HEADACH, WEAKNESS, WHEEZING, SNEEZING. EYES: BURNING
SENSATION, STINGING. SKIN: REDNESS, ITCHING, RASH. INGESTION: STOMACH
PAIN, VOMITING, DIARRHEA, SKIN RASH, TINNITUS.
Aggravation of Pre-Existing Conditions:
PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED.
LD 50 LC 50 Mixture
ORAL LD50 (RAT) IS UNKNOWN

SECTION 4 : FIRST AID MEASURES

First Aid
INHALATION: GET TO FRESH AIR. RESUSCITATE IF NEEDED. SKIN: REMOVE CONTAMINATED CLOTHING.
WASH SKIN WITH SOAP AND WATER FOR 20 MINUTES.
EYE: WASH FOR 20 MINUTES. INGESTION: IF CONSCIOUS,
GIVE 2 TO 4 GLASSES OF WATER AND INDUCE VOMITING. SEEK MEDICAL ATTENTION FOR ALL THE ABOVE CONDITIONS.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:
NONE
Flash Point Method:
N/P
Upper Flammable or Explosive Limit: N/R
Lower Flammable or Explosive Limit: N/R
Auto Ignition Temperature: N/K
Extinguishing Media:
USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Instructions:
WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. MOVE CONTAINERS FROM FIRE IF IT CAN BE DONE AT NO RISK. DO NOT SCATTER SPILLED MATERIAL.
Unusual Fire Hazards:
NONE SPECIFIED BY MANUFACTURER.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Leak Response:
OCCUPATIONAL SPILL: WHEN NOT INVOLVED IN FIRE, DO NOT ALLOW MATERIAL TO CONTAMINATE SEWERS AND WATER SOURCES. ABSORB MATERIAL IN INERT ABSORBANT AND PLACE IN CONTAINER FOR DISPOSAL.
Other Precautions:
IMMEDIATELY DEADLY TO LIFE AND HEALTH (IDLH) CONDITIONS = 20 MG/M3 (CO). POISONING MAY AFFECT LIVER, KIDNEYS, BLOOD, RESPIRATORY, CARDIOVASCULAR, ENDOCRINE, GASTROINTESTINAL, AND NERVOUS SYSTEMS. SKIN SENSITIZER.

Neutralizing Agent
NONE
SECTION 7: HANDLING and STORAGE

Handling:
STORE AWAY FROM INCOMPATIBLE MATERIALS. KEEP IN TIGHTLY CLOSED CONTAINER.
STORE IN A COOL, DRY AREA.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Ventilation System:
USE ADEQUATE MECHANICAL VENTILATION.

Hand Protection Description:
RUBBER

Eye/Face Protection:
SAFETY GLASSES/CHEMICAL SPLASH GOGGLES

Respiratory Protection:
USE NIOSH/MSHA APPROVED RESPIRATOR FOR DUST AND MISTS.

Other Protective:
CLOTHING TO PREVENT PROLONGED OR REPEATED CONTACT. EYE WASH STATION & SAFETY SHOWER.

Other:
DO NOT WEAR CONTACT LENSES WHEN USING.

Work Hygienic Practices
PRACTICE GOOD PERSONAL HYGENE AFTER USE. DO NOT EAT, DRINK, OR SMOKE UNTIL HANDS ARE WASHED.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance:
PINK TO RED, SLIGHTLY DELIQUESCENT, PRISMATIC CRYSTL

pH:
4.2

Decomposition Temperature:
UNKNOWN

Vapor Pressure:
UNKNOWN

Vapor Density:
UNKNOWN

Boiling Point:
1920F, 1049C

Melting Point:
189F, 87C

Solubility In Water:
APPRECIEABLE

Specific Gravity:
1.9

Evaporation Point:
UNKNOWN

Percent Volatile:
N/R
Viscosity:
N/A
Other:
  Corrosion Rate: UNKNOWN
Comment:
  NRC/State LIC Number: N/R

HCC
  N1

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:
  YES
Conditions to Avoid:
  EXCESSIVE HEAT, SPARKS, OPEN FLAME.
Incompatibilities with Other Materials:
  METALS, POTASSIUM, AND SODIUM. STRONG OXIDIZING AGENTS.
Hazardous Polymerization:
  NO
Hazardous Decomposition Products:
  TOXIC OXIDES OF COBALT AND CORROSIVE FUMES OF CLORINE.

Conditions To Avoid Polymerization
  NONE

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Paragraph:
  N/P

SECTION 12: ECOLOGICAL INFORMATION

Ecological Paragraph:
  N/P

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:
  CONTACT LOCAL ENVIRONMENTAL MANAGER. DISPOSE OF IN ACCORDANCE WITH LOCAL,
  STATE AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

Transportation Information:
  N/P

SECTION 15: REGULATORY INFORMATION
COBALT CHLORIDE:
SARA:
N/P
US Federal:
N/P
State:
N/P

SECTION 16: ADDITIONAL INFORMATION

MSDS Author:
GASTON L. PILLORI
Disclaimer:
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Other Information
N/P

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