

# ***Chem-Impex International Inc.***

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## **SAFETY DATA SHEET**

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### **SECTION 1. CHEMICAL IDENTIFICATION**

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|                                 |                                                     |
|---------------------------------|-----------------------------------------------------|
| CATALOG #:                      | 24620                                               |
| NAME:                           | Copper(II) bromide                                  |
| SYNONYMS:                       | Copper bromide                                      |
| 24 HOUR EMERGENCY<br>TELEPHONE: | (800) 535-5053(USA)<br>352-323-3500 (INTERNATIONAL) |
| TO REQUEST AN MSDS:             | (800) 869-9290                                      |
| CUSTOMER<br>SERVICE:            | (630) 766-2112                                      |

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### **SECTION 2. HAZARDS IDENTIFICATION**

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#### **CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)**  
ACUTE TOXICITY, ORAL (CATEGORY 4), H302  
SKIN CORROSION (CATEGORY 1B), H314  
SERIOUS EYE DAMAGE (CATEGORY 1), H318

SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 1), H400  
LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 1), H410

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE  
SECTION 16.

**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS  
PICTOGRAM**



SIGNAL WORD DANGER

**HAZARD STATEMENT(S)**

H302 HARMFUL IF SWALLOWED.  
H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  
H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING  
EFFECTS.

**PRECAUTIONARY STATEMENT(S)**

P260 DO NOT BREATHE DUST OR MIST.  
P264 WASH SKIN THOROUGHLY AFTER HANDLING.  
P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS  
PRODUCT.  
P273 AVOID RELEASE TO THE ENVIRONMENT.  
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE  
PROTECTION/ FACE PROTECTION.  
P301 + P312 + P330 IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/  
PHYSICIAN IF YOU FEEL UNWELL. RINSE MOUTH.  
P301 + P330 + P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE  
VOMITING.  
P303 + P361 + P353 IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL  
CONTAMINATED CLOTHING. RINSE SKIN WITH  
WATER/SHOWER.  
P304 + P340 + P310 IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP  
COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A  
POISON CENTER/DOCTOR.  
P305 + P351 + P338 +  
P310 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL  
MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND  
EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A  
POISON CENTER OR DOCTOR/ PHYSICIAN.  
P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.  
P391 COLLECT SPILLAGE.  
P405 STORE LOCKED UP.  
P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED  
WASTE DISPOSAL PLANT.

**HAZARDS NOT  
OTHERWISE  
CLASSIFIED (HNOC)  
OR NOT COVERED  
BY GHS**

NONE

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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MF: CuBr<sub>2</sub>

MW: 223.35

CAS-NO. 7789-45-9

PURITY: ≥ 99% (Assay)

#### HAZARDOUS COMPONENTS

| COMPONENT                 | CLASSIFICATION                                                                                            | CONCENTRATION |
|---------------------------|-----------------------------------------------------------------------------------------------------------|---------------|
| <b>Copper(II) bromide</b> |                                                                                                           |               |
|                           | ACUTE TOX. 4; SKIN CORR. 1B; EYE DAM. 1; AQUATIC ACUTE 1; AQUATIC CHRONIC 1; H302, H314, H318, H400, H410 | ≤ 100 %       |

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

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### SECTION 4. FIRST-AID MEASURES

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#### DESCRIPTION OF FIRST AID MEASURES

|                                    |                                                                                                                                           |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GENERAL ADVICE</b>              | CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.                                  |
| <b>IF INHALED</b>                  | IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.                           |
| <b>IN CASE OF SKIN CONTACT</b>     | TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.                        |
| <b>IN CASE OF EYE CONTACT</b>      | RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL. |
| <b>IF SWALLOWED</b>                | DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.               |
| <b>MOST IMPORTANT SYMPTOMS AND</b> | THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11                       |

**EFFECTS, BOTH ACUTE  
AND DELAYED**

**INDICATION OF ANY  
IMMEDIATE MEDICAL  
ATTENTION AND  
SPECIAL TREATMENT  
NEEDED**

NO DATA AVAILABLE

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**SECTION 5. FIRE AND EXPLOSION DATA**

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**EXTINGUISHING MEDIA**

**SUITABLE  
EXTINGUISHING MEDIA**

USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY  
CHEMICAL OR CARBON DIOXIDE.

**SPECIAL HAZARDS  
ARISING FROM THE  
SUBSTANCE OR MIXTURE**

HYDROGEN BROMIDE GAS, COPPER OXIDES

**ADVICE FOR  
FIREFIGHTERS**

WEAR SELF-CONTAINED BREATHING APPARATUS FOR  
FIREFIGHTING IF NECESSARY.

**FURTHER INFORMATION**

NO DATA AVAILABLE

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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**PERSONAL  
PRECAUTIONS,  
PROTECTIVE  
EQUIPMENT AND  
EMERGENCY  
PROCEDURES**

USE PERSONAL PROTECTIVE EQUIPMENT. AVOID  
DUST FORMATION. AVOID BREATHING VAPOURS, MIST  
OR GAS. ENSURE ADEQUATE VENTILATION.  
EVACUATE PERSONNEL TO SAFE AREAS. AVOID  
BREATHING DUST.  
FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL  
PRECAUTIONS**

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE  
TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.  
DISCHARGE INTO THE ENVIRONMENT MUST BE  
AVOIDED.

**METHODS AND  
MATERIALS FOR  
CONTAINMENT AND  
CLEANING UP**

PICK UP AND ARRANGE DISPOSAL WITHOUT  
CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN  
SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

**REFERENCE TO OTHER  
SECTIONS**

FOR DISPOSAL SEE SECTION 13.

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## SECTION 7. HANDLING AND STORAGE

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|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRECAUTIONS FOR SAFE HANDLING</b>                                | AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS.FURTHER PROCESSING OF SOLID MATERIALS MAY RESULT IN THE FORMATION OF COMBUSTIBLE DUSTS. THE POTENTIAL FOR COMBUSTIBLE DUST FORMATION SHOULD BE TAKEN INTO CONSIDERATION BEFORE ADDITIONAL PROCESSING OCCURS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED. FOR PRECAUTIONS SEE SECTION 2.2. |
| <b>CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</b> | KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.<br><br>Store at RT                                                                                                                                                                                                                                                                                                         |
| <b>SPECIFIC END USE(S)</b>                                          | APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED.                                                                                                                                                                                                                                                                                                          |

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### CONTROL PARAMETERS

#### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

| COMPONENT          | CAS-NO.   | VALUE | CONTROL PARAMETERS | BASIS                                                            |
|--------------------|-----------|-------|--------------------|------------------------------------------------------------------|
| Copper(II) bromide | 7789-45-9 | TWA   | 1 MG/M3            | USA. NIOSH RECOMMENDED EXPOSURE LIMITS                           |
|                    |           | PEL   | 1 MG/M3            | CALIFORNIA PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS |

### EXPOSURE CONTROLS

|                                         |                                                                                                                            |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>APPROPRIATE ENGINEERING CONTROLS</b> | HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY. |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------|

### PERSONAL PROTECTIVE EQUIPMENT

**EYE/FACE PROTECTION** FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

**SKIN PROTECTION** HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

FULL CONTACT  
MATERIAL: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.11 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

SPLASH CONTACT  
MATERIAL: NITRILE RUBBER  
MINIMUM LAYER THICKNESS: 0.11 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

**BODY PROTECTION** COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

**RESPIRATORY PROTECTION** WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

**CONTROL OF  
ENVIRONMENTAL  
EXPOSURE**

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO  
DO SO. DO NOT LET PRODUCT ENTER DRAINS.  
DISCHARGE INTO THE ENVIRONMENT MUST BE  
AVOIDED.

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**SECTION 9.      PHYSICAL AND CHEMICAL PROPERTIES**

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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

|                                            |                                  |
|--------------------------------------------|----------------------------------|
| APPEARANCE                                 | Grayish black crystalline powder |
| ODOUR                                      | NO DATA AVAILABLE                |
| ODOUR THRESHOLD                            | NO DATA AVAILABLE                |
| PH                                         | NO DATA AVAILABLE                |
| MELTING                                    | > 300 °C                         |
| POINT/FREEZING POINT                       |                                  |
| INITIAL BOILING POINT                      |                                  |
| AND BOILING RANGE                          |                                  |
| FLASH POINT                                |                                  |
| EVAPORATION RATE                           | NO DATA AVAILABLE                |
| FLAMMABILITY (SOLID,<br>GAS)               | NO DATA AVAILABLE                |
| UPPER/LOWER                                | NO DATA AVAILABLE                |
| FLAMMABILITY OR<br>EXPLOSIVE LIMITS        |                                  |
| VAPOUR PRESSURE                            | NO DATA AVAILABLE                |
| VAPOUR DENSITY                             | NO DATA AVAILABLE                |
| RELATIVE DENSITY                           | 4.77 g/mL at 25 °C               |
| WATER SOLUBILITY                           | NO DATA AVAILABLE                |
| PARTITION COEFFICIENT:<br>N- OCTANOL/WATER | NO DATA AVAILABLE                |
| AUTO-IGNITION                              | NO DATA AVAILABLE                |
| TEMPERATURE                                |                                  |
| DECOMPOSITION                              | NO DATA AVAILABLE                |
| TEMPERATURE                                |                                  |
| VISCOSITY                                  | NO DATA AVAILABLE                |
| EXPLOSIVE PROPERTIES                       | NO DATA AVAILABLE                |
| OXIDIZING PROPERTIES                       | NO DATA AVAILABLE                |

**OTHER SAFETY INFORMATION**

NO DATA AVAILABLE

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**SECTION 10.      STABILITY AND REACTIVITY**

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|                           |                                                 |
|---------------------------|-------------------------------------------------|
| <b>REACTIVITY</b>         | NO DATA AVAILABLE                               |
| <b>CHEMICAL STABILITY</b> | STABLE UNDER RECOMMENDED STORAGE<br>CONDITIONS. |

|                                           |                                                                                                                                                                                                 |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>POSSIBILITY OF HAZARDOUS REACTIONS</b> | NO DATA AVAILABLE                                                                                                                                                                               |
| <b>CONDITIONS TO AVOID</b>                | AVOID MOISTURE.                                                                                                                                                                                 |
| <b>INCOMPATIBLE MATERIALS</b>             | ALKALI METALS                                                                                                                                                                                   |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS</b>   | HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - HYDROGEN BROMIDE GAS, COPPER OXIDES<br>OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE<br>IN THE EVENT OF FIRE: SEE SECTION 5 |

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## SECTION 11. TOXICOLOGICAL INFORMATION

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### INFORMATION ON TOXICOLOGICAL EFFECTS

|                                          |                                                                                                                                                                      |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ACUTE TOXICITY</b>                    | LD50 ORAL - RAT - 536 MG/KG<br>REMARKS: (EXTERNAL MSDS)<br>ABSORPTION<br><br>INHALATION: NO DATA AVAILABLE<br><br>DERMAL: NO DATA AVAILABLE<br><br>NO DATA AVAILABLE |
| <b>SKIN CORROSION/IRRITATION</b>         | SKIN - RABBIT<br>RESULT: CAUSES BURNS.<br>REMARKS: (EXTERNAL MSDS)                                                                                                   |
| <b>SERIOUS EYE DAMAGE/EYE IRRITATION</b> | CAUSES SERIOUS EYE DAMAGE.                                                                                                                                           |
| <b>RESPIRATORY OR SKIN SENSITISATION</b> | SENSITISATION TEST: - GUINEA PIG<br>RESULT: NEGATIVE<br>(OECD TEST GUIDELINE 406)                                                                                    |
| <b>GERM CELL MUTAGENICITY</b>            | AMES TEST<br>RESULT: NEGATIVE<br>(EXTERNAL MSDS)                                                                                                                     |
| <b>CARCINOGENICITY IARC:</b>             | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.              |

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NTP:                                                      | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| OSHA:                                                     | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>REPRODUCTIVE TOXICITY</b>                              | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>   | <p>ACUTE ORAL TOXICITY - IF INGESTED, SEVERE BURNS OF THE MOUTH AND THROAT, AS WELL AS A DANGER OF PERFORATION OF THE OESOPHAGUS AND THE STOMACH.</p> <p>ACUTE INHALATION TOXICITY - MUCOSAL IRRITATIONS, COUGH, SHORTNESS OF BREATH, POSSIBLE DAMAGES: DAMAGE OF RESPIRATORY TRACT</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b> | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>ASPIRATION HAZARD</b>                                  | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>ADDITIONAL INFORMATION</b>                             | <p>RTECS: NOT AVAILABLE</p> <p>SYMPTOMS OF SYSTEMIC COPPER POISONING MAY INCLUDE: CAPILLARY DAMAGE, HEADACHE, COLD SWEAT, WEAK PULSE, AND KIDNEY AND LIVER DAMAGE, CENTRAL NERVOUS SYSTEM EXCITATION FOLLOWED BY DEPRESSION, JAUNDICE, CONVULSIONS, PARALYSIS, AND COMA. DEATH MAY OCCUR FROM SHOCK OR RENAL FAILURE. CHRONIC COPPER POISONING IS TYPIFIED BY HEPATIC CIRRHOSIS, BRAIN DAMAGE AND DEMYELINATION, KIDNEY DEFECTS, AND COPPER DEPOSITION IN THE CORNEA AS EXEMPLIFIED BY HUMANS WITH WILSON"S DISEASE. IT HAS ALSO BEEN REPORTED THAT COPPER POISONING HAS LEAD TO HEMOLYTIC ANEMIA AND ACCELERATES ARTERIOSCLEROSIS, BLOOD DISORDERS, LIVER INJURY MAY OCCUR, DAMAGE TO THE LUNGS. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.</p> <p>OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED.</p> <p>HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.</p> <p>STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE</p> |

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**SECTION 12. ECOLOGICAL INFORMATION**

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|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TOXICITY</b>                           | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                             |
| <b>PERSISTENCE AND DEGRADABILITY</b>      | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                             |
| <b>BIOACCUMULATIVE POTENTIAL</b>          | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                             |
| <b>MOBILITY IN SOIL</b>                   | NO DATA AVAILABLE                                                                                                                                                                                                                                                                                                             |
| <b>RESULTS OF PBT AND VPVB ASSESSMENT</b> | PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED                                                                                                                                                                                                                                    |
| <b>OTHER ADVERSE EFFECTS</b>              | AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL.<br>VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.<br>WE HAVE NO QUANTITATIVE DATA CONCERNING THE ECOLOGICAL EFFECTS OF THIS PRODUCT.<br>FURTHER INFORMATION ON ECOLOGY DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED. |

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS**

|                               |                                                                                                                                                                                                                                                                                                      |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRODUCT</b>                | OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. |
| <b>CONTAMINATED PACKAGING</b> | DISPOSE OF AS UNUSED PRODUCT.                                                                                                                                                                                                                                                                        |

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**SECTION 14.     TRANSPORT INFORMATION**

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**DOT (US)**

PROPER SHIPPING NAME:     CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.  
                                          (Copper(II) bromide)  
UN NUMBER:                   3260  
CLASS:                         8  
PACKING GROUP:               II  
REPORTABLE QUANTITY  
(RQ):  
POISON INHALATION           NO  
HAZARD:

**IMDG**

PROPER SHIPPING NAME:     CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.  
                                          (Copper(II) bromide)  
UN NUMBER:                   3260  
CLASS:                         8  
PACKING GROUP:               II  
EMS-NO:                      F-A, S-B  
MARINE POLLUTANT:           YES

**IATA**

PROPER SHIPPING NAME:     CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.  
                                          (Copper(II) bromide)  
UN NUMBER:                   3260  
CLASS:                         8  
PACKING GROUP:               II

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**SECTION 15.     REGULATORY INFORMATION**

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**SARA 302 COMPONENTS**     THIS MATERIAL DOES NOT CONTAIN ANY  
                                          COMPONENTS WITH A SECTION 302 EHS TPQ.

**SARA 313 COMPONENTS**

THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS  
ESTABLISHED BY SARA TITLE III, SECTION 313:

|                    | CAS-NO.   | REVISION DATE |
|--------------------|-----------|---------------|
| Copper(II) bromide | 7789-45-9 | 07-08-2015    |

**SARA 311/312 HAZARDS**     ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS**

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS**

|                    | CAS-NO.   | REVISION DATE |
|--------------------|-----------|---------------|
| Copper(II) bromide | 7789-45-9 | 07-08-2015    |

**CALIFORNIA PROP. 65 COMPONENTS**

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

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**SECTION 16. OTHER INFORMATION**

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**FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.**

|      |                                                       |
|------|-------------------------------------------------------|
| H302 | HARMFUL IF SWALLOWED.                                 |
| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.              |
| H410 | VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. |

**MSDS LEGEND**

|        |                                                          |
|--------|----------------------------------------------------------|
| MW:    | MOLECULAR WEIGHT                                         |
| MF:    | MOLECULAR FORMULA                                        |
| VOC:   | VOLATILE ORGANIC COMPOUNDS                               |
| ACGIH: | AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS |
| CAS:   | CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER                |
| OSHA:  | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION            |
| PEL:   | PERMISSIBLE EXPOSURE LIMIT (OSHA)                        |
| TLV:   | THRESHOLD LIMIT VALUE (ACGIH)                            |

**IMPORTANT:**

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VERSION:3.1.

REVISION DATE: 01/27/2017