

BACHARACH, INC. MSDS

STANNOUS CHLORIDE SOLUTION

MSDS NO: 4099-1460

ACUTE HEALTH HAZARDS:

EYE CONTACT: May cause severe burns with corneal ulceration and possible blindness.

SKIN CONTACT: May cause severe burns.

INHALATION: May cause irritation of the nose, throat and respiratory tract. High concentrations may produce bloody nasal secretions and pulmonary edema.

INGESTION: May cause burns to the gastrointestinal tract, metallic taste, nausea, vomiting, diarrhea, anemia, liver damage.

CHRONIC HEALTH EFFECTS: Repeated exposure to the mist may cause inflammation of the upper respiratory tract, chronic bronchitis and etching of the dental enamel. Prolonged overexposure to stannous chloride has been found to cause liver changes, testicular degeneration, pancreatic atrophy and gastrointestinal irritation in laboratory animals.

CARCINOGEN STATUS: IARC has classified strong inorganic acid mists containing sulfuric acid as carcinogenic to humans (Group 1).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing skin and respiratory disorders may be at increased risk from exposure.

SEE SECTION 11 - TOXICOLOGICAL INFORMATION FOR ADDITIONAL DATA

SECTION 4: FIRST AID

EYE CONTACT: Flush thoroughly with copious amounts of running water for 20 minutes, lifting the lids occasionally. Get immediate medical attention.

SKIN CONTACT: Flush thoroughly with water for 20 minutes. Remove contaminated clothing and launder before re-use. Get medical attention.

INHALATION: Remove victim to fresh air and give artificial respiration if needed. Get immediate medical attention.

INGESTION: Never give anything by mouth to an unconscious or convulsing person. Immediately give the victim 1 to 2 glasses of water or milk to drink. Do not induce vomiting. Get immediate medical attention.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A TEST METHOD: N/A

AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: This material is not combustible. Use any media that is

N/D=Not Determined

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N/A=Not Applicable

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appropriate for the surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear NIOSH approved positive pressure self contained breathing apparatus and full protective clothing. Use water to keep exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride, tin oxide, sulfuric acid, oxides of sulfur.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Wear suitable protective equipment. Dike and contain with inert absorbent. Carefully neutralize with soda ash and absorb. Place in suitable container. Wash residue with water.

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SECTION 7: HANDLING AND STORAGE

WORK PRACTICES: Prevent contact with the eyes, skin & clothing. Wear recommended protective clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep containers tightly closed when not in use.

SPECIAL PRECAUTIONS: Corrosive. Empty containers retain residues and may be hazardous-follow all precautions when handling.

STORAGE: Store in a cool, well ventilated area, away from alkalis, oxidizers and other incompatible materials. Keep container tightly closed.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use general or local exhaust ventilation as needed to maintain concentration below the PEL.

RESPIRATORY PROTECTION: If the concentration exceeds the exposure limits use an approved dust/mist/acid gas respirator. At concentrations above 10 times the TLV an approved supplied air or self-contained respirator may be required.

GLOVES: Impervious such as rubber or neoprene.

EYE PROTECTION: Chemical safety goggles and face shield recommended. Do not wear contact lenses.

OTHER PROTECTIVE EQUIPMENT: Protective apron or coveralls. Safety shower and eye wash in the work area.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Slightly cloudy liquid, odorless. N/A

pH: <1 SPECIFIC GRAVITY: Unknown
BOILING POINT: Not available VAPOR PRESSURE: 14 mmHG @ 20C(water)
MELTING POINT: Not available VAPOR DENSITY: 0.7 (water)
SOLUBILITY IN WATER: Complete PERCENT VOLATILE: 87%
COEFFICIENT WATER/OIL: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid heating material to boiling.

INCOMPATIBILITY: Alkalis, oxidizers, bromine trifluoride, calcium acetylide, chlorine, ethylene oxide, hydrazine hydrate, metal nitrates, potassium, sodium, turpentine.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, tin oxide, sulfuric acid, oxides of sulfur.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: N/A

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA: LD50 stannous chloride:700 mg/kg oral rat. LD50 for sulfuric acid:2140 mg/kg oral rat.

IRRITANCY DATA: This material is corrosive to all tissues.

SENSITIZATION: None of the components have been reported to cause sensitization in animals or humans.

REPRODUCTIVE TOXICITY: None of the components have been reported to cause reproductive toxicity in laboratory animals or humans.

TERATOGENICITY: None of the components have been reported to cause teratogenic effects in laboratory animals or humans.

MUTAGENICITY: Stannous chloride has been found to be mutagenic in some test systems.

SYNERGISTIC EFFECTS: There are no chemicals known to cause any additive adverse health effects.

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SECTION 12: ECOLOGICAL INFORMATION

The ecological effects of this product have not been evaluated.

SECTION 13: DISPOSAL

Dispose in accordance with all local, state and federal regulations.

RCRA HAZARDOUS WASTE CODES: D002

SECTION 14: TRANSPORTATION DATA

US DOT SHIPPING NAME: SULFURIC ACID MIXTURE, (SULFURIC ACID 5%), 8, UN 1830, PG II

DOT LABELS REQUIRED: CORROSIVE

EMERGENCY RESPONSE GUIDE NUMBER: 137

IATA SHIPPING NAME: SULPHURIC ACID MIXTURE, 8, UN 1830, PG II

IATA LABELS REQUIRED: CORROSIVE (CARGO AIRCRAFT 1-30 LITERS)

SECTION 15: OTHER REGULATORY INFORMATION

SARA 311/312: Hazard Categories for SARA Section 311/312 Reporting:

Acute health, chronic health.

SARA 313: This product contains the following chemicals subject to Annual Release

Reporting Requirements under SARA Section 313 (40 CFR 372):

Sulfuric acid 5%

CERCLA SECTION 103 REPORTABLE QUANTITY: 20,000 lbs (Sulfuric acid - 1000 lbs)

CALIFORNIA PROPOSITION 65: This product contains the following substances known to the State of California to cause Cancer and/or Reproductive Harm: None

US TOXIC SUBSTANCES CONTROL ACT: All of the components of this product are listed on the EPA TSCA Inventory.

EUROPEAN INVENTORY OF COMMERCIAL CHEMICAL SUBSTANCES: All of the components of this product are listed on the EINECS Inventory.

JAPAN MITI: All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the components of this product are listed on the Canadian Domestic Substances List.

CANADIAN WHMIS CLASSIFICATION: Class D - Division 2B (Toxic Material Causing Other Chronic Effects); Class E (Corrosive Material)

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EUROPEAN COMMUNITY LABELING CLASSIFICATION: Harmful (Xi)

EUROPEAN COMMUNITY RISK AND SAFETY PHRASES: R34, S24/25, S26, S36/37/39, S45
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SECTION 16: OTHER INFORMATION

NFPA HAZARD RATING: HEALTH: 3 FIRE: 0 REACTIVITY: 1

DATE OF LATEST MSDS REVISION: 03-12-97

REVISION SUMMARY: Revised Section 3, Carcinogen data, Transportation (ERG#), Section 14 and Section 15, R&S Phrases.
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The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Bacharach, Inc., it is the users obligation to assure safe use of this product.