# SAFETY DATA SHEET

**Preparation Date:** 1/22/2018 **Revision Date:** 1/22/2018 **Revision Number:** G1

## 1. IDENTIFICATION

**Product identifier**

**Product code:** AA110
**Product Name:** ANTIMONY ATOMIC ABSORPTION STANDARD

**Other means of identification**
**Synonyms:** Antimony Oxide in 20% Hydrochloric acid solution
**CAS #:** Mixture
**RTECS #** Not available
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**
**Recommended use:** No information available.
**Uses advised against** No information available

**Supplier:**
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

**Order Online At:** https://www.spectrumchemical.com
**Emergency telephone number** Chemtrec 1-800-424-9300
**Contact Person:** Martin LaBenz (West Coast)
**Contact Person:** Ibad Tirmiz (East Coast)

## 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| | |
|---|---|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Corrosive to metals | Category 1 |

**Label elements**

**Danger**

**Hazard statements**
Harmful if inhaled
Causes severe skin burns and eye damage
Suspected of causing cancer
May cause respiratory irritation

May be corrosive to metals

**Hazards not otherwise classified (HNOC)**
Not Applicable

**Other hazards**
Not available

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep only in original container

**Precautionary Statements - Response**
*Immediately call a POISON CENTER or doctor/physician*
Absorb spillage to prevent material damage
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.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Store in corrosive resistant/ .? container with a resistant inner liner

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|---|---|---|
| Water | 7732-18-5 | 92-93 |
| Hydrogen chloride | 7647-01-0 | 7-8 |
| Antimony Trioxide | 1309-64-4 | 0.1 |

## 4. FIRST AID MEASURES

**First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

**Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.

**Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

**Ingestion:** Do not induce vomiting without medical advice. Do not give Sodium Bicarbonate (Baking Soda). Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

Severe skin and eye irritation or burns
Irritating to respiratory system
Burning sensation of the respiratory tract
Coughing
Hoarseness of the voice
Choking sensation
Dyspnea (Shortness of breath and difficulty breathing)
Shallow respiration
Can burn mouth, throat, and stomach
May cause salivation
Thirst
May cause difficulty swallowing
May cause abdominal pain, nausea, vomiting, diarrhea
May cause inflammation of the lungs (pneumonitis)
May cause chemical burns to the respiratory tract
Weak, rapid pulse or rapid heart rate (Tachycardia)
May cause erosion of tooth enamel

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

**Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

## Specific hazards arising from the chemical

**Hazardous Combustion Products:** No information available.

**Specific hazards:** For Hydrogen chloride/concentrated Hydrochloric acid:. Contact with metals may evolve flammable hydrogen gas. Calcium carbide reacts with hydrogen chloride gas with incandescence. Uranium phosphide reacts with hydrochloric acid to release spontaneously flammable phosphine. Rubidium acetylene carbide burns with slightly warm Hydrochloric acid. Lithium silicide in contact with hydrogen chloride becomes incandescent. When dilute hydrochloric acid is used, gas that is spontaneously flammable in air is evolved. Magnesium boride treated with concentrated hydrochloric acid produces spontaneously flammable gas. Cesium acetylene carbide burns in hydrogen chloride gas. Cesium carbide ignites in contact with Hydrochloric acid unless acid is dilute. Hydrogen chloride in contact with the following can cause an explosion, ignition on contact, or other violent/vigorous reaction: Acetic anhydride AgClO + CCl4 Alcohols + hydrogen cyanide, Aluminum Aluminum-titanium alloys (with HCl vapor), 2-Amino ethanol, Ammonium hydroxide, Calcium carbide Ca3P2 Chlorine + dinitroanilines (evolves gas), Chlorosulfonic acid Cesium carbide Cesium acetylene carbide, 1,1-Difluoroethylene Ethylene diamine Ethylene imine, Fluorine, HClO4 Hexalithium disilicide H2SO4 Metal acetylides or carbides, Magnesium boride, Mercuric sulfate, Oleum, Potassium permanganate, beta-Propiolactone Propylene oxide Rubidium carbide, Rubidium, acetylene carbide Sodium (with aqueous HCl), Sodium hydroxide Sodium tetraselenium, Sulfonic acid, Tetraselenium tetranitride, U3P4 , Vinyl acetate. Silver perchlorate with carbon tetrachloride in the presence of hydrochloric acid produces trichloromethyl perchlorate which detonates at 40 deg. C.

## Special Protective Actions for Firefighters

**Specific Methods:** No information available.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:** Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk.

**Methods for cleaning up** Neutralize with Sodium carbonate or Sodium bicarbonate. Dilute with water. Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Technical Measures/Precautions:**
Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

**Safe Handling Advice**
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Technical Measures/Storage Conditions:**
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. May corrode metallic surfaces. Do not store in uncoated metallic containers. Store in a segregated and approved area. Store away from incompatible materials.

**Incompatible Materials:**
Oxidizing agents
Metals
Alkalis
Organic materials

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**National occupational exposure limits**

**United States**

| Components | CAS-No. | OSHA | NIOSH | ACGIH | AIHA WEEL |
|---|---|---|---|---|---|
| Water | 7732-18-5 | None | None | None | None |
| Hydrogen chloride | 7647-01-0 | 5 ppm Ceiling<br>7 mg/m³ Ceiling | 5 ppm Ceiling<br>7 mg/m³ Ceiling | 2 ppm Ceiling | None |
| Antimony Trioxide | 1309-64-4 | 0.5 mg/mg (as Sb) | 0.5 mg/mg (as Sb) | 0.5 mg/mg (as Sb) | None |

**Canada**

| Components | CAS-No. | **Canada - Alberta** | **Canada - British Columbia** | **Canada - Ontario** | **Canada - Quebec** |
|---|---|---|---|---|---|
| Water | 7732-18-5 | None | None | None | None |
| Hydrogen chloride | 7647-01-0 | 2 ppm Ceiling<br>3 mg/m³ Ceiling | 2 ppm Ceiling | 2 ppm Ceiling | 5 ppm Ceiling<br>7.5 mg/m³ Ceiling |
| Antimony Trioxide | 1309-64-4 | 0.5 mg/mg (as Sb) | 0.5 mg/mg (as Sb) | None | 0.5 mg/m³ TWAEV Sb |

**Australia and Mexico**

| Components | CAS-No. | **Australia** | **Mexico** |
|---|---|---|---|
| Water | 7732-18-5 | None | None |
| Hydrogen chloride | 7647-01-0 | None | 5 ppm Ceiling<br>7 mg/m³ Ceiling |
| Antimony Trioxide | 1309-64-4 | 0.5 mg/mg (as Sb) | 0.5 mg/m³ TWA<br>1 mg/m³ TWA |

**Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:** Face-shield

**Skin and body protection:** Chemical resistant apron
Long sleeved clothing
Gloves
If working with large quantities:
Chemical resistant protective suit
Boots

**Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**
Liquid

**Appearance:**
Clear.

**Color:**
Colorless.

**Odor:**
No information available.

**Taste**
No information available.

**Formula:**
No information available

**Molecular/Formula weight:**
No information available

**Flammability:**
No information available

**Flashpoint (°C/°F):**
No information available.

**Flash Point Tested according to:**

**Autoignition Temperature (°C/°F):**

Not available

No information available

**Lower Explosion Limit (%):**
No information available

**Upper Explosion Limit (%):**
No information available

**Melting point/range(°C/°F):**
No information available

**Decomposition temperature(°C/°F):**
No information available

**Boiling point/range(°C/°F):**
No information available

**Bulk density:**
No information available

**Density (g/cm3):**
No information available

**Specific gravity:**
1.1019

**pH:**
No information available

**Vapor pressure @ 20°C (kPa):**
No information available

**Evaporation rate:**
No information available

**Vapor density:**
No information available

**VOC content (g/L):**
No information available

**Odor threshold (ppm):**
No information available

**Partition coefficient (n-octanol/water):**
No information available

**Viscosity:**
No information available

**Miscibility:**
No information available

**Solubility:**
Soluble in Water

## 10. STABILITY AND REACTIVITY

**Reactivity**

For Hydrogen chloride or concentrated Hydrochloric Acid:
Reacts with most metals to produce flammable Hydrogen gas.
Sodium reacts very violently with gaseous hydrogen chloride.
Calcium phosphide and Hydrochloric acid undergo a very energetic reaction.
Hydrogen chloride reacts with oxidizers releasing chlorine gas.
Hydrogen chloride gas is emitted when Hydrochloric acid comes in contact with Sulfuric acid.
Adsorption of Hydrochloric acid onto Silicon dioxide results in exothermic reaction.
Hydrogen chloride causes aldehydes and epoxides to violently polymerize.
Reacts violently with bases, oxidizers forming toxic chlorine gas.
Reacts, often violently or vigorously or exothermically, with acetic anhydride, active metals, aliphatic amines, alkanolamines, alkylene oxides, aromatic amines, amides, 2-aminoethanol, ammonia, ammonium hydroxide, calcium phosphide, chlorosulfonic acid, ethylene diamine, ethyleneimine, epichlorohydrin, isocyanates, metal acetylides, oleum, organic anhydrides, perchloric acid, 3-propiolactone, uranium phosphide, sulfuric acid, vinyl acetate, vinylidene fluoride, alcohols + hydrogen cyanide, Aluminum phosphide, Aluminum-titanium alloys, 2-Amino ethanol, Ammonium hydroxide, Ammonium, 1,4-Benzoquinone diimine, Cesium telluroacylated, Chlorine + dinitroanilines, Chloroacetaldehyde oxime, Cyanogen chloride, 1,1-Difluoroethylene, dinitroanilines, Ethylene, Ethyl 2-formylpropionate oxime, Hexalithium disilicide, Hydrogen peroxide, Methyl vinyl ether, Nitric acid + glycerol, Potassium, Potassium permanganate, beta-Propiolactone, Propylene oxide, Rubidium acetylide, Silver chlorite, Sodium 2-allyloxy-6-nitrophenylpyruvate oxime, Sodium hydroxide, Sodium teranitride, 2,4,6-Tri(2-acetylhydrazino)-1,3,5-trinitrobenzene, Sulfonic acid, Cesium cyanotridecahydrodecarborate(2-), Potassium ferricyanide, Vinylidene fluoride, Potassium ferrocyanide, Ammonium hexacyanoferrate (II).
Reaction with oxidizers such as permanganates, chlorates, chlorites, and hypochlorites may produce chlorine or bromine gas.
Reacts vigorously with alkalies and with many organic materials.
Cesium acetylene carbide burns in hydrogen chloride gas.
Lithium silicide in contact with hydrogen chloride becomes incandescent.
Magnesium boride in contact with concentrated hydrochloric acid produces spontaneously flammable gas.
Rubidium acetylene carbide burns with slightly warm hydrochloric acid.
Rubidium carbide ignites in contact with hydrochloric acid unless acid is dilute.
Uranium phosphide reacts with hydrochloric acid to release spontaneously flammable phosphine.
Calcium carbide reacts with hydrogen chloride gas with incandescence.
Absorption of gaseous hydrogen chloride on mercuric sulfate becomes violent @ 125 deg C.
Reaction of silver perchlorate with carbon tetrachloride in presence of small amount of hydrochloric acid produces trichloromethyl perchlorate, which detonates @ 40 deg C.
Cesium carbide ignites in contact with hydrochloric acid unless acid is dilute.
Hydrochloric acid in the presence of alcohol and glycols results in dehydration reactions.
Hydrogen chloride gas can react with formaldehyde to form bis(chloromethyl)ether, a human carcinogen.
Exothermic reaction with water
Attacks some plastics, rubber, and coatings.

**Chemical stability**

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Stable at normal conditions.

**Incompatible Materials:** Oxidizing agents
Metals
Alkalis
Organic materials

**Hazardous decomposition products:** Hydrogen chloride gas. Hydrogen. Hydrogen, by reaction with metals.

**Other Information**
**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Principal Routes of Exposure:**
Skin. Inhalation. Ingestion.

**Acute Toxicity**

**Component Information**

| Water | |
|---|---|
| CAS-No. | 7732-18-5 |

**LD50/oral/rat =** > 90 mL/kg Oral LD50 Rat
**LD50/oral/mouse =** No information available
**LD50/dermal/rabbit =** No information available
**LD50/dermal/rat =** No information available
**LC50/inhalation/rat =** No information available
**LC50/inhalation/mouse =** No information available
**Other LD50 or LC50information =** No information available

| Hydrogen chloride | |
|---|---|
| CAS-No. | 7647-01-0 |

**LD50/oral/rat =** 238 - 277 mg/kg Oral LD50 Rat
700 mg/kg Oral LD50 Rat (test substance: 31.5% hydrochloric acid solution)
**LD50/oral/mouse =** No information available
**LD50/dermal/rabbit =** >5010 mg/kg (Test substance: 31.5% hydrochloric acid solution - from European Chemicals Bureau IUCLID dataset)
**LD50/dermal/rat =** No information available
**LC50/inhalation/rat =** 3124 ppm Inhalation LC50 Rat 1 h
1562 ppm 4 h
1.68 mg/L Inhalation LC50 Rat 1h
**LC50/inhalation/mouse =** 1108 ppm 1 h
**Other LD50 or LC50information =** 900 mg/kg oral LD50 Rabbit (no information on test substance)

| Antimony Trioxide | |
|---|---|
| CAS-No. | 1309-64-4 |

**LD50/oral/rat =** > 34600 mg/kg Oral LD50 Rat
**LD50/oral/mouse =** No information available
**LD50/dermal/rabbit =** No information available
**LD50/dermal/rat =** No information available
**LC50/inhalation/rat =** No information available
**LC50/inhalation/mouse =** No information available
**Other LD50 or LC50information =** No information available

**Product Information**

**LD50/oral/rat =**
**VALUE- Acute Tox Oral =** No information available

**LD50/oral/mouse =**
**Value - Acute Tox Oral =** No information available

**LD50/dermal/rabbit**
**VALUE-Acute Tox Dermal =** No information available

**LD50/dermal/rat**
**VALUE -Acute Tox Dermal =** No information available

**LC50/inhalation/rat**
**VALUE-Vapor =** No information available
**VALUE-Gas =** No information available
**VALUE-Dust/Mist =** No information available

**LC50/Inhalation/mouse**
**VALUE-Vapor =** No information available
**VALUE - Gas =** No information available
**VALUE - Dust/Mist =** No information available

**Symptoms**

| | |
|---|---|
| **Skin Contact:** | Causes skin burns. |
| **Eye Contact:** | Causes eye burns. |
| **Inhalation** | Harmful by inhalation. Material may be destructive to tissue of the mucous membranes and upper respiratory tract. Inhalation of hydrochloric acid fumes produces nose, throat, and laryngeal burning, and irritation, pain and inflammation, coughing, sneezing, choking sensation, hoarseness, laryngeal spasms, upper respiratory tract edema, chest pains, as well has headache, and palpitations. Inhalation of high concentrations can result in corrosive burns, necrosis of bronchial epithelium, constriction of the larynx and bronchi, nasospetal perforation, glottal closure, dyspnea, bronchitis. Chemical pneumonitis and pulmonary edema can also occur, particularly if exposure is prolonged. May affect the liver. |
| **Ingestion** | Harmful if swallowed. Causes irritation and burning, ulceration, or perforation of the gastrointestinal tract and resultant peritonitis, gastric hemorrhage and infection. Can also cause nausea, vomitting (with "coffee ground" emesis), diarrhea, thirst, difficulty swallowing, salivation, chills, fever, uneasiness, shock, strictures and stenosis (esophogeal, gastric, pyloric). May affect behavior (excitement), the cardiovascular system (weak rapid pulse, tachycardia), respiration (shallow respiration), and urinary system (kidneys- renal failure, nephritis). Acute ingestion can also cause erosion of tooth enamel. |
| **Aspiration hazard** | No information available. |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Prolonged or repeated inhalation and/or ingestion may affect liver, and cause bleeding of nose and gums, nasal and oral mucosal ulceration, conjunctivitis. It may also affect respiratory tract (changes in pulmonary function, chronic bronchitis, overt respiratory tract abnormalities), teeth (yellowing of teeth and erosion of tooth enamel), kidneys, and behavior/central nervous system (muscle contraction or spasticity).Prolonged or repeated skin contact may cause dermatitis.Prolonged or repeated eye contact with vapor/mist can cause conjunctivitis.

**Sensitization:** No information available.

**Mutagenic Effects:** For Hydrogen Chloride/Hydrochloric Acid:
Animal experiments showed mutagenic effects
Cytogenetic Analysis - chromosome aberration test (Chinese Hamster ovary):
Genotoxic effects were observed

**Carcinogenic effects:** Not considered carcinogenic.

| Components | CAS-No. | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|---|---|---|---|---|---|---|---|
| Water | 7732-18-5 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |
| Hydrogen chloride | 7647-01-0 | Group 3 - Not classifiable - Monograph 54 [1992] | A4 Not Classifiable as a Human Carcinogen | Not listed | Not listed | Not listed | Not listed |
| Antimony Trioxide | 1309-64-4 | Group 2B - Possibly Carcinogenic to Humans - Monograph 47 [1989] | A2 Suspected Human Carcinogen | Not listed | Present | Not listed | Not listed |

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available
**Developmental Effects:** For Hydrogen Chloride/Hydrochloric Acid
No information on developmental toxicity effects on humans was found
An increase in postnatal mortality was seen in experiments where rats were exposed to Hydrogen Chloride for 1 hour
**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.
**STOT - repeated exposure** No information available.
**Target Organs:** Skin. Eyes. Respiratory system.

## 12. ECOLOGICAL INFORMATION

## Ecotoxicity

**Ecotoxicity effects:** Aquatic environment.

*Hydrogen chloride - 7647-01-0*
**Freshwater Fish Species Data:** 282 mg/L LC50 Gambusia affinis 96 h
862 mg/L LC50 Leuciscus idus
**Water Flea Data:** <56 mg/L LC50 Daphnia magna 72h
*Antimony Trioxide - 1309-64-4*
**Freshwater Algae Data:** 0.63 - 0.8 mg/L EC50 Pseudokirchneriella subcapitata 72 h 0.65 - 0.81 mg/L EC50 Pseudokirchneriella subcapitata 96 h
**Freshwater Fish Species Data:** 80 mg/L LC50 Pimephales promelas 96 h static 1 1000 mg/L LC50 Brachydanio rerio 96 h static 1
**Water Flea Data:** 1000 mg/L EC50 Daphnia magna 48 h 361.5 - 496.0 mg/L EC50 Daphnia magna 48 h

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

## Disposal Methods

**Waste from residues / unused products:**
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**
Empty containers should be taken for local recycling, recovery or waste disposal

| Components | CAS-No. | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|---|---|---|---|---|---|
| Water | 7732-18-5 | None | None | None | None |
| Hydrogen chloride | 7647-01-0 | None | None | None | None |
| Antimony Trioxide | 1309-64-4 | None | None | None | None |

## 14. TRANSPORT INFORMATION

**DOT**
**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Subsidiary Class** No information available
**Packing group:** II
**Emergency Response Guide Number** 157
**Marine Pollutant** No data available
**DOT RQ (lbs):** No information available
**Special Provisions** A3, A6, B3, B15, IB2, N41, T8, TP2
**Symbol(s):** [DOT]: (R5) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 5000 pounds (2270 Kilograms).
**Description:** UN1789, Hydrochloric acid, 8, II

**TDG (Canada)**

**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Subsidiary Risk:** No information available
**Packing Group:** II
**Marine Pollutant** No Information available
**Description:** UN1789, Hydrochloric acid, 8, II

**ADR**
**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Packing Group:** II
**Subsidiary Risk:** No information available
**Special Provisions** 520
**Description:** UN1789, Hydrochloric acid, 8, II

**IMO / IMDG**
**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Subsidiary Risk:** No information available
**Packing Group:** II
**Marine Pollutant** No information available
**EMS:** F-A
**Description** UN1789, Hydrochloric acid, 8, II

**RID**
**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Subsidiary Risk:** 8
**Packing Group:** II
**Special Provisions** 520
**Description:** UN1789, Hydrochloric acid, 8, II

**ICAO**
**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Subsidiary Risk:** No information available
**Packing Group:** II
**Description:** UN1789, Hydrochloric acid, 8, II
**Special Provisions** A3

**IATA**
**UN-No:** UN1789
**Proper Shipping Name:** Hydrochloric acid solution
**Hazard Class:** 8
**Subsidiary Risk:** No information available
**Packing Group:** II
**ERG Code:** 8L
**Special Provisions** No information available
**Description:** UN1789, Hydrochloric acid, 8, II

## 15. REGULATORY INFORMATION

**International Inventories**

| Components | CAS-No. | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|---|---|---|---|---|---|---|---|---|
| *Water* | 7732-18-5 | Present | Present KE-35400 | Present | Not present | Present | Present | Present 231-791-2 |
| *Hydrogen chloride* | 7647-01-0 | PresentACTIVE | Present KE-20189 | Present | Present (1)-215 | Present | Present | Present 231-595-7 |
| *Antimony Trioxide* | 1309-64-4 | Present | Present KE-09846 | Present | Present (1)-543 | Present | Present | Present 215-175-0 |

## U.S. Regulations

*Hydrogen chloride*

**Massachusetts RTK:** Present
**Massachusetts EHS:** extraordinarily hazardous
**New Jersey RTK Hazardous Substance List:** 1012
**New Jersey (EHS) List:** 1012 500 lb TPQ
2909 500 lb TPQ
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present
**New Jersey TCPA - EHS:** 15000lbTQ
5000lbTQ
5600lbTQ
2000lbTQ
**Pennsylvania RTK:** Environmental hazard
**Pennsylvania RTK - Environmental Hazard List** Present
**Michigan PSM HHC:** = 5000 lb TQ
**Minnesota - Hazardous Substance List:** Present
**New York Release Reporting - List of Hazardous Substances:**
5000 lb RQ
100 lb RQ
**Louisana Reportable Quantity List for Pollutants:** 5000lbfinal RQAs listed in 40 CFR 117.3 Table 117.3 and 40 CFR 302.4 Table 302.4
2270kgfinal RQAs listed in 40 CFR 117.3 Table 117.3 and 40 CFR 302.4 Table 302.4
5000lbRQAs listed in Louisiana Administrative Code, Title 33, Part 1, Subpart 2, Chapter 39, Subchapter E. Applies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period
1000lbRQAs listed in Louisiana Administrative Code, Title 33, Part 1, Subpart 2, Chapter 39, Subchapter E. Applies to unauthorized emissions based on total mass emitted into the atmosphere
**California Directors List of Hazardous Substances:** Present
**FDA - Food Additives Generally Recognized as Safe (GRAS):** 21 CFR 182.1057
**FDA - 21 CFR - Total Food Additives** 133.129, 155.191, 155.194, 160.105, 160.185, 172.560, 172.892, 182.1057

*Antimony Trioxide*

**Massachusetts RTK:** Present
**New Jersey RTK Hazardous Substance List:** sn 0149
**New Jersey (EHS) List:** SN 2223 500 lb. TPQ (antimony compounds)
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present
**Pennsylvania RTK:** Environmental hazard
**Pennsylvania RTK - Environmental Hazard List** Present
**Minnesota - Hazardous Substance List:** Present
**New York Release Reporting - List of Hazardous Substances:**
1000 lb RQ
100 lb RQ
**Louisana Reportable Quantity List for Pollutants:** 1000lbfinal RQ
454kgfinal RQ
**California Directors List of Hazardous Substances:** Present

### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

**Chemicals Known to the State of California to Cause Cancer:**

⚠WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components | CAS-No. | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|---|---|---|---|---|---|
| Water | 7732-18-5 | Not Listed | Not Listed | Not Listed | Not Listed |

| | | | | | |
|---|---|---|---|---|---|
| Hydrogen chloride | 7647-01-0 | Not Listed | Not Listed | Not Listed | Not Listed |
| Antimony Trioxide | 1309-64-4 | carcinogen | Not Listed | Not Listed | Not Listed |

**CERCLA/SARA**

| Components | CAS-No. | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|---|---|---|---|---|---|---|
| *Water* | 7732-18-5 | None | None | None | None | None |
| *Hydrogen chloride* | 7647-01-0 | 5000 lb final RQ<br>2270 kg final RQ | 5000 lb EPCRA RQ | None | None | 1.0 % de minimis concentration |
| *Antimony Trioxide* | 1309-64-4 | 1000 lb final RQ<br>454 kg final RQ | None | None | None | None |

**U.S. TSCA**

| Components | CAS-No. | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|---|---|---|---|
| Water | 7732-18-5 | Not Applicable | Not Applicable |
| Hydrogen chloride | 7647-01-0 | Not Applicable | Not Applicable |
| Antimony Trioxide | 1309-64-4 | Not Applicable | 10/04/1982 10/04/1992 |

## Canada

**WHIMIS 2015 - GHS Classifications**

WHMIS 2015 Hazard Classification Information: .

| Component | WHMIS 2015 Hazard Classification |
|---|---|
| Water<br>7732-18-5 ( 92-93 ) | Not a dangerous product according to HPR classification criteria |
| Hydrogen chloride<br>7647-01-0 ( 7-8 ) | Hydrogen Chloride: Gases under pressure - Liquefied gas: H280 Contains gas under pressure, may explode when heated.; Corrosive to Metals - Category 1: H290 May be corrosive to metals. (potentially corrosive to metals; the supplier should be contacted for more information); Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled.; Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.<br>Hydrochloric Acid: Corrosive to Metals - Category 1: H290 May be corrosive to metals. (potentially corrosive to metals; the supplier should be contacted for more information); Acute toxicity - Oral - Category 4: H302 Harmful if swallowed. (3.6% in aqueous solution); Acute toxicity - Inhalation - Category 2: H330 Fatal if inhaled.; Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Skin corrosion/irritation - Category 2: H315 Causes skin irritation. (3.6% in aqueous solution); Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation. (3.6% in aqueous solution) |
| Antimony Trioxide<br>1309-64-4 ( 0.1 ) | Carcinogenicity - Category 2: H351 Suspected of causing cancer.; Combustible Dust - Category 1: May form combustible dust concentrations in air (factors such as combustibility and explosiveness of dusts including composition and shape and size of particles could cause substance to belong to 'Combustible dust' hazard class) |

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

**WHMIS 1988 Hazard Class**
E Corrosive material

## Components

| | WHMIS 1988 |
|---|---|
| **Water** | Uncontrolled product according to WHMIS classification criteria |
| **Hydrogen chloride** | A,D1A,E<br>D1A,E<br>E 0.036% in aqueous solution, 0.36% in aqueous solution, 3.6% in aqueous solution<br>D1B,E 28% in aqueous solution<br>D1A,E 31.45% in aqueous solution, 35.2% in aqueous solution |
| **Antimony Trioxide** | D2A |

**Canada Controlled Products Regulation:**
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

| **Components** | **WHMIS Ingredient Disclosure List -** |
|---|---|
| Hydrogen chloride | 1 % |
| Antimony Trioxide | 1 % |

**Inventory**

| Components | CAS-No. | Canada (DSL) | Canada (NDSL) |
|---|---|---|---|
| Water | 7732-18-5 | Present | Not Listed |
| Hydrogen chloride | 7647-01-0 | Present | Not Listed |
| Antimony Trioxide | 1309-64-4 | Present | Not Listed |

| **Components** | CAS-No. | CEPA Schedule I - Toxic Substances |
|---|---|---|
| Water | 7732-18-5 | Not listed |
| Hydrogen chloride | 7647-01-0 | Not listed |
| Antimony Trioxide | 1309-64-4 | Not listed |
| Components | CAS-No. | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Water | 7732-18-5 | Not listed |
| Hydrogen chloride | 7647-01-0 | Not listed |
| Antimony Trioxide | 1309-64-4 | Not listed |

**EU Classification**

**EU GHS - SV - CLP 1272/2008**

| Components | CAS-No. | EU GHS - SV - CLP (1272/2008) |
|---|---|---|
| Water | 7732-18-5 | |
| Hydrogen chloride | 7647-01-0 | Hydrogen Chloride: Gases under pressure: H280 Contains gas under pressure, may explode when heated.; Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage.017-002-00-2<br>Hydrochloric Acid: Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (C >= 25 %); Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation. (C >= 10 %)017-002-01-X<br>Skin corrosion/irritation - Skin Corr. |

| | | |
|---|---|---|
| | | 1B: H314 Causes severe skin burns and eye damage. (C >= 25 %); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation. (10 % <= C <25 %); Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation. (10 % <= C <25 %); Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation. (C >= 10 %)017-002-01-X |
| Antimony Trioxide | 1309-64-4 | Carcinogenicity - Carc. 2: H351 Suspected of causing cancer.051-005-00-X |

**EU - CLP (1272/2008)**

**R-phrase(s)**

R36/37/38 - Irritating to eyes, respiratory system and skin.

**S -phrase(s)**
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 1/2 - Keep locked up and out of the reach of children.

| Components | CAS-No. | **Classification** | **Concentration Limits:** | **Safety Phrases** |
|---|---|---|---|---|
| Water | 7732-18-5 | | No information | |
| Hydrogen chloride | 7647-01-0 | Hydrogen Chloride<br>T; R23<br>C; R35<br>Hydrochloric Acid:<br>+ hydrochloric acid ... %<br>C; R34 - Xi; R37<br>Concentration Limit(s):<br>C >= 25 % C; R34-37<br>10 % <= C < 25 % Xi; R36/37/38 | Hydrogen Chloride:<br>0.02%<=C<0.2% Xi;R36/37/38<br>0.2%<=C<0.5% C;R34<br>0.5%<=C<1% C;R20-34<br>1%<=C<5% C;R20-35<br>5%<=C T;C;R23-35 | For Hydrogen Chloride:<br>S1/2 S9 S26 S36/37/39 S45<br>Hydrochloric Acid:<br>S(1/2)-S26-S45 |
| Antimony Trioxide | 1309-64-4 | Carc.Cat.3; R40 | No information | S2 S22 S36/37 |

**The product is classified in accordance with Annex VI to Directive 67/548/EEC**

**Indication of danger:**
Xi - Irritant.


## 16. OTHER INFORMATION

**Preparation Date:** 1/22/2018
**Revision Date:** 1/22/2018

**Prepared by:** Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**