# Safety Data Sheet

FOR REGULATORY AND SDS QUESTIONS (U.S. AND CANADA):
**CALL THE PRODUCT STEWARDSHIP LINE**
**1- 908-791-2336 9 AM TO 6 PM ET (Mon-Fri)**

## Section 1. Identification

**Product name** : **ACID Sn40Pb60 Solder Wire**
**Product code** : 4084060566ACID
**Product type** : Solid.
**Date of issue/Date of revision** : January 23 2022.

| Manufacturer - Supplier | Telephone no.: | Emergency phone: |
|---|---|---|
| Alpha Assembly Solutions Inc.<br>800 West Thorndale Avenue<br>Itasca, IL 60143 USA | 1-800-253-7837<br>1-630-616-4000 | DOMESTIC NORTH AMERICA<br>202-464-2554 |
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## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** :
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 2
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (Fertility) - Category 1A
TOXIC TO REPRODUCTION (Unborn child) - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (nervous system, reproductive organs) - Category 1
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 1

**GHS label elements**

**Hazard pictograms** :

**Signal word** : Danger

**Hazard statements** :
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
May damage fertility or the unborn child.
Suspected of causing genetic defects.
Suspected of causing cancer.
Causes damage to organs through prolonged or repeated exposure. (nervous system,

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# Section 2. Hazards identification

reproductive organs)
Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

**Response** : Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Store locked up.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : Do not taste or swallow. Wash thoroughly after handling.

**Hazards not otherwise classified** : Causes digestive tract burns.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| Ingredient name | % | CAS number |
|---|---|---|
| lead | 50-60 | 7439-92-1 |
| tin | 30-40 | 7440-31-5 |
| Zinc. Salt | 1-10 | - |
| anilinium chloride | 1-10 | 142-04-1 |
| Ammonium salt. | 0.1-1.0 | - |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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# Section 4. First aid measures

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : Corrosive to the digestive tract. Causes burns.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**See toxicological information (Section 11)**

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## Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

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

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**Methods and materials for containment and cleaning up**

**Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| lead | **OSHA PEL (United States, 5/2005).**<br>TWA: 0.05 mg/m³ 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 50 µg/m³, (as Pb) 8 hours.<br>**ACGIH TLV (United States, 3/2017). Notes: as Pb**<br>TWA: 0.05 mg/m³, (as Pb) 8 hours.<br>**OSHA PEL (United States, 6/2016). Notes: as Pb**<br>TWA: 50 µg/m³, (as Pb) 8 hours.<br>**NIOSH REL (United States, 10/2016). Notes: See Appendix C - Supplemental Exposure Limits Note: The REL and PEL also apply to other lead compounds (as Pb).**<br>TWA: 0.05 mg/m³ 8 hours. |
| tin | **ACGIH TLV (United States, 3/2017).**<br>TWA: 2 mg/m³, (as Sn) 8 hours.<br>**NIOSH REL (United States, 10/2016).**<br>TWA: 2 mg/m³, (as Sn) 10 hours.<br>**OSHA PEL (United States, 6/2016).**<br>TWA: 2 mg/m³, (as Sn) 8 hours. |
| Zinc. Salt | **ACGIH TLV (United States, 3/2017).**<br>STEL: 2 mg/m³ 15 minutes. Form: Fume<br>TWA: 1 mg/m³ 8 hours. Form: Fume<br>**NIOSH REL (United States, 10/2016).**<br>STEL: 2 mg/m³ 15 minutes. Form: Fume<br>TWA: 1 mg/m³ 10 hours. Form: Fume<br>**OSHA PEL (United States, 6/2016).**<br>TWA: 1 mg/m³ 8 hours. Form: Fume<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 2 mg/m³ 15 minutes. Form: Fume |

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## Section 8. Exposure controls/personal protection

| | |
|---|---|
| Ammonium salt. | TWA: 1 mg/m³ 8 hours. Form: Fume<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 20 mg/m³ 15 minutes.<br>TWA: 10 mg/m³ 8 hours.<br>**ACGIH TLV (United States, 3/2017).**<br>STEL: 20 mg/m³ 15 minutes. Form: Fume<br>TWA: 10 mg/m³ 8 hours. Form: Fume<br>**NIOSH REL (United States, 10/2016).**<br>STEL: 20 mg/m³ 15 minutes. Form: Fume<br>TWA: 10 mg/m³ 10 hours. Form: Fume |

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Solid.

**Color** : Silver. Gray.

**Odor** : Characteristic.

**Odor threshold** : Not available.

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## Section 9. Physical and chemical properties

**pH** : Not available.

**Melting point** : Not available.

**Boiling point** : 1740°C (3164°F)

**Flash point** : Not available.

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Relative density** : Not available.

**Solubility** : Not available.

**VOC** : 11.2 g/l

**Partition coefficient: n-octanol/water** : Not available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : Not available.

**Aerosol product**

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Incompatibility with various substances** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

**Routes of entry** : Dermal contact. Inhalation. Ingestion.

**Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| lead | LD50 Oral | Rat | >5000 mg/kg | - |
| tin | LD50 Oral | Rat | >2000 mg/kg | - |
| Zinc. Salt | LD50 Oral | Mouse | 329 mg/kg | - |
| | LD50 Oral | Rat | 350 mg/kg | - |
| anilinium chloride | LD50 Oral | Rat | 840 mg/kg | - |
| Ammonium salt. | LD50 Oral | Rat | 1650 mg/kg | - |

**Irritation/Corrosion**

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# Section 11. Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| Zinc. Salt | Skin - Severe irritant | Rabbit | - | 120 hours 1 Percent | - |
| anilinium chloride | Eyes - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |
| Ammonium salt. | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 100 milligrams | - |

## Sensitization

Not available.

## Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|---|
| lead | - | Subject: Mammalian-Animal | Equivocal |

## Carcinogenicity

No applicable toxicity data

### Additional information:

## Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| lead | - | 2B | Reasonably anticipated to be a human carcinogen. |

## Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Dose | Exposure |
|---|---|---|---|---|---|---|
| lead | - | - | Equivocal | Rat - Female | Oral: 520 mg/kg | - |
| | - | - | Equivocal | Rat - Female | Inhalation: 3 mg/m³ | 24 hours per day |
| | Equivocal | - | - | Mouse - Female | Oral: 300 mg/kg | - |
| | - | Equivocal | - | Mouse | Oral: 4099.2 mg/kg | - |

## Teratogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| lead | Equivocal - Oral | Mammal - species unspecified | 2118 mg/kg | - |
| | Equivocal - Inhalation | Rat | 10 mg/m³ | 24 hours per day |

## Specific target organ toxicity

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| Zinc. Salt | Category 3 | Not applicable. | Respiratory tract irritation |

## Specific target organ toxicity (repeated exposure)

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# Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| lead | Category 1 | Not determined | nervous system and reproductive organs |
| anilinium chloride | Category 1 | Not determined | Not determined |

**Aspiration hazard**

Not available.

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : Corrosive to the digestive tract. Causes burns.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

**General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : Suspected of causing genetic defects.

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# Section 11. Toxicological information

**Teratogenicity** : May damage the unborn child.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : May damage fertility.

## Numerical measures of toxicity

### Acute toxicity estimates

| Route | ATE value |
|---|---|
| Oral | 7094.4 mg/kg |
| Dermal | 12020.2 mg/kg |
| Inhalation (vapors) | 120.2 mg/l |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| lead | Acute EC50 105 ppb Marine water | Algae - Chaetoceros sp. - Exponential growth phase | 72 hours |
| | Acute EC50 0.489 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Acute EC50 8000 µg/l Fresh water | Aquatic plants - Lemna minor | 4 days |
| | Acute LC50 530 µg/l Fresh water | Crustaceans - Ceriodaphnia reticulata | 48 hours |
| | Acute LC50 4400 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 0.44 ppm Fresh water | Fish - Cyprinus carpio - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| | Chronic NOEC 0.25 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Chronic NOEC 0.03 µg/l Fresh water | Fish - Cyprinus carpio | 4 weeks |
| Zinc. Salt | Acute EC50 26 µg/l | Algae - Navicula incerta | 96 hours |
| | Acute EC50 34 µg/l Fresh water | Algae - Chlorella vulgaris - Exponential growth phase | 72 hours |
| | Acute EC50 1.8 mg/l Fresh water | Aquatic plants - Lemna aequinoctialis | 96 hours |
| | Acute EC50 100 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 49.99 µg/l Fresh water | Crustaceans - Moina irrasa - Neonate | 48 hours |
| | Acute LC50 0.027 mg/l Marine water | Fish - Limanda punctatissima - Pre-larvae | 96 hours |
| | Chronic NOEC 20 µg/l Marine water | Algae - Chlorella sp. - Exponential growth phase | 72 hours |
| | Chronic NOEC 1000 µg/l Fresh water | Crustaceans - Procambarus clarkii - Intermolt | 21 days |
| | Chronic NOEC 80 µg/l Fresh water | Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) | 21 days |
| | Chronic NOEC 31.5 µg/l Fresh water | Fish - Oncorhynchus mykiss | 30 days |
| Ammonium salt. | Acute EC50 0.07 mg/l Marine water | Algae - Hormosira banksii - Gamete | 72 hours |
| | Acute LC50 20 µg/l Fresh water | Crustaceans - Macrobrachium rosenbergii - Post-larvae | 48 hours |
| | Acute LC50 390 µg/l Fresh water | Daphnia - Daphnia magna - Young | 48 hours |
| | Acute LC50 80 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| | Chronic EC10 0.03 mg/l Fresh water | Daphnia - Daphnia obtusa | 21 days |
| | Chronic NOEC 0.6 mg/l Marine water | Algae - Entomoneis punctulata - Exponential growth phase | 72 hours |
| | Chronic NOEC 330 µg/l Fresh water | Crustaceans - Crangonyx sp. - Juvenile (Fledgling, Hatchling, Weanling) | 21 days |
| | Chronic NOEC 0.006 mg/l Fresh water | Fish - Ictalurus punctatus - Fry | 30 days |

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# Section 12. Ecological information

## Persistence and degradability

Not available.

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Zinc. Salt<br>Ammonium salt. | -<br>-3.2 | 60960<br>- | high<br>low |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# Section 14. Transport information

| | DOT Classification | TDG Classification | Mexico Classification | UN | IMDG | IATA |
|---|---|---|---|---|---|---|
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - | - | - | - |
| Transport hazard class(es) | - | - | - | - | - | - |
| Packing group | - | - | - | - | - | - |
| Environmental hazards | No. | No. | No. | No. | No. | No. |

| | |
|---|---|
| Additional information - TDG Classification | |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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## Section 14. Transport information

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 5(a)2 proposed significant new use rule (SNUR): No products were found.
TSCA 5(a)2 final significant new use rule (SNUR): No products were found.
TSCA 12(b) one-time export notification: No products were found.
**TSCA 12(b) annual export notification**: lead
Refer to Proposed Rule (59 Federal Register 11122, March 9, 1994 ) for details on TSCA 12(b) applicability for lead.

**United States inventory (TSCA 8b)** : All components are listed or exempted.

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 311/312**

**Classification** : Immediate (acute) health hazard
Delayed (chronic) health hazard

**SARA 313**

| | Product name | CAS number | % |
|---|---|---|---|
| Form R - Reporting requirements | lead<br>Zinc. Salt | 7439-92-1<br>- | 50-60<br>1-10 |
| Supplier notification | lead<br>Zinc. Salt | 7439-92-1<br>- | 50-60<br>1-10 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**California Prop. 65**

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**Canada**

**Canada inventory** : All components are listed or exempted.

**International lists**

**National inventory**

**Australia** : All components are listed or exempted.
**China** : All components are listed or exempted.
**Europe** : All components are listed or exempted.
**Japan** : All components are listed or exempted.
**Malaysia** : Not determined.
**New Zealand** : All components are listed or exempted.
**Philippines** : All components are listed or exempted.
**Republic of Korea** : All components are listed or exempted.
**Taiwan** : All components are listed or exempted.
**Thailand** : Not determined.
**Turkey** : Not determined.
**Viet Nam** : Not determined.

*Continued on next page*

# Section 16. Other information

## Hazardous Material Information System (U.S.A.)

| | |
|---|---|
| Health | 2 |
| Flammability | 0 |
| Physical hazards | 0 |

## Procedure used to derive the classification

| Classification | Justification |
|---|---|
| Skin Irrit. 2, H315 | Calculation method |
| Eye Irrit. 2A, H319 | Calculation method |
| Skin Sens. 1, H317 | Calculation method |
| Muta. 2, H341 | Calculation method |
| Carc. 2, H351 | Calculation method |
| Repr. 1A, H360 (Fertility) | Calculation method |
| Repr. 1A, H360 (Unborn child) | Calculation method |
| STOT RE 1, H372 (nervous system, reproductive organs) | Calculation method |
| Aquatic Acute 1, H400 | Calculation method |
| Aquatic Chronic 1, H410 | Calculation method |

## History

**Date of issue/Date of revision** : January 23 2022.

**Date of previous issue** : No previous validation.

**Version** : 1

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**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

**Indicates information that has changed from previously issued version.**

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