# Safety Data Sheet (SDS)

## 1. IDENTIFICATION

**Issue Date: 06/01/2015, SDS # 002, Version #: 01**

| | |
|---|---|
| **Product Name** | AGM Maintenance Free and Conventional Powersports Batteries supplied with acid pack |
| **Synonyms** | Battery Supplied Dry with Acid Pack, Fresh Pack |
| **Product Use** | Vehicle Electrical System |
| **Manufacturer / Supplier / Address** | **Yacht Battery Co., Ltd.**<br>4F-5, No. 925, Sec. 4, Taiwan Blvd., Taichung, 40767 Taiwan, R.O.C.<br>**Yacht Technology (Vietnam), Co., Ltd.**<br>Lot_A9H_CN, Bau Bang Industrial Park, Bau Bang District, Binh Duong Province, Vietnam<br>www.yacht-battery.com |
| **Transportation Emergency Number** | Infotrac (24-Hour Emergency Contact Number)<br>1-800-535-5053 (North America)<br>1-352-323-3500 (International) |

**NOTE: The Yacht battery is considered an article as defined by 29 CFR 1910.1200 (OSHA Hazard Communication Standard). The information contained in this SDS is supplied at the customer's request for information only.**

## 2. GHS HAZARD(S) IDENTIFICATION

| Health | | Environmental | Physical |
|---|---|---|---|
| Acute Toxicity (Oral, dermal, inhalation) | Category 4 | Aquatic Chronic 1<br>Aquatic Acute 1 | Explosive Chemical, Division 1.3 |
| Skin corrosion / irritation | Category 1A | | |
| Eye Damage | Category 1 | | |
| Reproductive | Category 1A | | |
| Carcinogenicity (lead) | Category 1B | | |
| Carcinogenicity (acid mist) | Category 1A | | |
| Specific target organ toxicity (repeated exposure) | Category 2 | | |

**GHS Label Elements:**

| Health | Environmental | Physical |
|---|---|---|
|  |  |  |
| **Hazard Statements**<br>**DANGER!**<br>• Causes severe skin.<br>• Causes serious eye damage.<br>• May damage fertility or the unborn child if ingested or inhaled.<br>• May cause cancer if ingested or inhaled.<br>• Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure.<br>• May form explosive air / gas mixture during charging.<br>• Extremely flammable gas (hydrogen).<br>• Explosive, fire, blast or projection hazard. | **Precautionary Statements**<br>• Wash thoroughly after handling.<br>• Do not eat, drink or smoke when using this product.<br>• Wear protective gloves / protective clothing, eye protection / face protection.<br>• Avoid breathing dust / fume / gas / mist / vapors / spray.<br>• Use only outdoors or in a well-ventilated area.<br>• Causes skin irritation, serious eye damage.<br>• Contact with internal components may cause irritation or severe burns. Avoid contact with internal acid.<br>• Irritating to eyes, respiratory system, and skin. | |

# Safety Data Sheet (SDS)

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| INGREDIENTS (Chemical / Common Names) | CAS Number | % by Weight |
|---|---|---|
| Inorganic Lead / Lead Compounds | 7439-92-1 | 60-85 |
| Electrolyte ($H_2SO_4$ / $H_2O$) | 7664-93-9 | 10-28 |
| Antimony | 7440-36-0 | <0.5 |
| Tin | 7440-31-5 | <0.01 |
| Arsenic | 7440-38-2 | <0.01 |
| Calcium | 7440-70-2 | <0.01 |
| Polypropylene | 9003-07-0 | 3-10 |

**Composition Comments: All concentrations are in percent by weight.**

## 4. FIRST AID MEASURES

**Note: Under normal conditions of battery use, internal components will not present a health hazard. The following information is provided for battery electrolyte (acid) and lead for exposures that may occur during battery production or container breakage or under extreme heat conditions such as fire.**

| | |
|---|---|
| **Inhalation** | • Sulfuric Acid:<br>Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.<br>• Lead:<br>Remove from exposure, gargle, wash nose and lips; consult physician. |
| **Skin contact** | • Sulfuric Acid:<br>Flush with large amounts of water for at least 15 minutes; remove contaminated clothing completely, including shoes. If symptoms persist, seek medical attention.<br>• Lead:<br>Wash immediately with soap and water. |
| **Eye contact** | • Sulfuric Acid and Lead:<br>Flush immediately with large amounts of water for at least 15 minutes while lifting lids; Seek immediate medical attention if eyes have been exposed directly to acid. |
| **Ingestion** | • Sulfuric Acid:<br>Give large quantities of water; Do NOT induce vomiting or aspiration into the lungs may occur and can cause permanent injury or death; consult physician.<br>• Lead:<br>Consult physician immediately. |

## 5. FIRE FIGHTING MEASURES

| | |
|---|---|
| **Flash Point** | Not applicable unless individual components exposed. |
| **Auto ignition Temperature** | No data available. |
| **Flammable Limits** | LEL = 4.1% (Hydrogen Gas in air) ; UEL = 74.2% |
| **Extinguishing Media** | CO2; foam; dry chemical. Do not use carbon dioxide directly on cells. Avoid breathing vapors. Use appropriate media for surrounding fire. |
| **Unsuitable Extinguishing Media** | Water |
| **Special Fire Fighting Procedures** | Use positive pressure, self-contained breathing apparatus. Beware of acid splatter during water application and wear acid-resistant clothing, gloves, face and eye protection. If batteries are on charge, shut off power to the charging equipment, but note that strings of series connected batteries may still pose risk of electric shock even when charging equipment is shut down. |

| | |
|---|---|
| **Unusual Fire and Explosion Hazard** | Highly flammable hydrogen gas is generated during charging and operation of batteries. If ignited by burning cigarette, naked flame or spark, may cause battery explosion with dispersion of casing fragments and corrosive liquid electrolyte. Carefully follow manufacturer's instructions for installation and service. Keep away all sources of gas ignition and do not allow metallic articles to simultaneously contact the negative and positive terminals of a battery. Follow manufacturer's instructions for installation and service. |

## *6. ACCIDENTAL RELEASE MEASURES*

| | |
|---|---|
| **Protective Measures to be Taken if Material is Released or Spilled** | Stop flow of material, contain / absorb small spills with dry sand, earth, and vermiculite. Do not use combustible materials. If possible, carefully neutralize spilled acid with soda ash, sodium bicarbonate, lime, etc. Wear acid-resistant clothing, boots, gloves, and face shield. Do not allow discharge of unneutralized acid to sewer. Acid must be managed in accordance with approved local, state, and federal requirements. Consult state environmental agency and / or federal EPA. |
| **Waste Disposal Method** | Dispose of as a hazardous waste. Dispose of in accordance with applicable local, state and federal regulations. |

## *7. HANDLING AND STORAGE*

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|---|---|
| **Handling** | Unless involved in recycling operations, do not breach the casing or empty the contents of the battery. Handle carefully and avoid tipping, which may allow electrolyte leakage. There may be increasing risk of electric shock from strings of connected batteries. Keep containers tightly closed when not in use. If battery case is broken, avoid contact with internal components. Keep vent caps on and cover terminals to prevent short circuits. Place cardboard between layers of stacked automotive batteries to avoid damage and short circuits. Keep away from combustible materials, organic chemicals, reducing substances, metals, strong oxidizers and water. Use banding or stretch wrap to secure items for shipping. |
| **Storage** | Store frost-free under roof; prevent short circuits. Do not store in sealed, unventilated areas. Seek agreement with local water authorities in case of larger quantities. Avoid overheating and charging. Do not use organic solvents or anything other than manufacturers recommended cleaners on the batteries. If batteries have to be stored in storage rooms, it is imperative that the instructions for use are observed. |
| **Charging** | There is a possible risk of electric shock from charging equipment and from strings of series connected batteries, whether or not being charged. Shut-off power to chargers whenever not in use and before detachment of any circuit connections. Batteries being charged may generate and release flammable hydrogen gas. Charging space should be ventilated. Keep battery vent caps in position. Prohibit smoking and avoid creation of flames and sparks nearby. Wear face and eye protection when near batteries being charged. |
| **Other** | Follow Manufacturers Recommendations regarding maximum recommended currents and operating temperature range. Do not overcharge beyond the recommended upper charging voltage limit. Applying pressure or deforming the battery may lead to disassembly followed by eye, skin and throat irritation. |

## 8. *EXPOSURE CONTROLS / PERSONAL PROTECTION*

**Occupational exposure limits (mg/m³)**

| Ingredients | CAS Number | OSHA PEL | ACGIH | US NIOSH | Quebec PEV | Ontario OEL | EU OEL |
|---|---|---|---|---|---|---|---|
| Lead, inorganic | 7439-92-1 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.15 (b) |
| Antimony | 7440-36-0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 (b,c) |
| Tin | 7440-31-5 | 2 | 2 | 2 | - | - | - |
| Copper | 7440-50-8 | 1 | 1 | 1 | 1 | 1 (a) | 0.1 (d) |
| Arsenic | 7440-38-2 | 0.01 | 0.01 | 0.01 | - | - | - |
| Polypropylene | 9003-07-0 | N.E. | N.E. | N.E. | N.E. | N.E. | N.E. |
| Electrolyte ($H_2SO_4$ / $H_2O$) | 7664-93-9 | 1 | 0.2 | 1 | 1 | 0.2 | 0.05 (e) |

NOTES:
(a) As dust/mists
(b) As inhalable aerosol
(c) Based on OEL's of Austria, Belgium, Denmark, France, Netherlands, Switzerland, & UK
(d) Based on OEL of Netherlands
(e) Thoracic fraction

- **OSHA:**
  Lead - US OSHA Specifically Regulated Substances (29 CFR 1910.1001 – 1050)
  Sulfuric Acid - US OSHA Table Z-1 Limits for Air Contaminants (29CFR 1910.1000)
- **ACGIH:** US ACGIH Threshold Limit Values
- **NIOSH:** US NIOSH Pocket Guide to Chemical Hazards

**Biological limit values**

**ACGIH:** ACGIH Biological Exposure Indices

| Ingredient | ACGIH | Determinant | Specimen |
|---|---|---|---|
| Lead | 300 µg/l | Lead | Blood |

**Exposure Guidelines:**
The OELs listed above are only applicable if the internal components of the battery cell are released. Follow standard monitoring procedures.

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|---|---|
| **Engineering Controls (Ventilation)** | Store AGM Maintenance Free and Conventional Powersports Batteries at ambient temperature. Never recharge batteries in an unventilated, enclosed space. Do not subject product to open flame or fire. Avoid conditions that could cause arcing between terminals. |
| **Respiratory Protection (NIOSH / MSHA approved)** | NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.<br>When concentrations of sulfuric acid mist are known to exceed PEL, use NIOSH or MSHA-approved respiratory protection. |
| **Skin Protection** | NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.<br>If battery case is damaged, use rubber or plastic acid-resistant gloves with elbow-length gauntlet, acid-resistant apron, clothing and boots. |
| **Eye Protection** | NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.<br>If necessary to handle damage product where exposure to the organic electrolyte is a possibility, chemical splash goggles and a face shield are recommended. |
| **Other Protection** | Safety footwear meeting the requirements of ANSI Z 41.1 is recommended when it is necessary to handle the finished product. |

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| **General Hygiene Considerations** | When using, do not eat, drink, or smoke. Wash hands after handling. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice. |

## *9. PHYSICAL AND CHEMICAL PROPERTIES*

| | |
|---|---|
| **Appearance and Odor** | Manufactured article; no apparent odor. |
| **Odor Threshold** | Not applicable |
| **pH** | Not applicable |
| **Melting Point** | Lead – 621.32 °F (327.4 °C)<br>Not applicable unless individual components exposed. |
| **Boiling Point** | Battery Electrolyte (Acid) – 230 - 233.6 °F (110 - 112 °C)<br>Lead – 35.13 °F (1.740 °C)<br>Not applicable unless individual components exposed. |
| **Flash Point** | Not applicable |
| **Evaporation Rate (Butyl Acetate = 1)** | Not applicable |
| **Vapor Pressure (mm Hg @ 20 ° C)** | Battery Electrolyte (Acid) 11.7 |
| **Upper / lower flammability or explosive limits** | Hydrogen Flammability Limit Lower – 4.1 %<br>Flammability Limit Upper – 74.2 % |
| **Vapor Pressure** | 10.95 mm Hg (Sulfuric Acid) |
| **Vapor Density** | Not applicable |
| **Relative Density** | 1.21 - 1.3 Battery Electrolyte (Acid) |
| **Solubility** | Lead and Lead dioxide are not soluble.<br>100 % Battery Electrolyte (Acid). |
| **% Volatile by Weight** | Not applicable unless individual components exposed. |
| **Partition coefficient (n-octanol / water)** | Not applicable |
| **Auto-ignition temperature** | Not applicable |
| **Decomposition temperature** | Not applicable |
| **Viscosity** | Not applicable |
| **Density** | 11.35 g/cm³ Lead |

## *10. STABILITY AND REACTIVITY*

| | |
|---|---|
| **Reactivity** | This product is non-reactive under normal conditions or use, storage, and transport. |
| **Stability** | The AGM Maintenance Free and Conventional Powersports batteries are considered stable. |
| **Conditions to Avoid** | Sparks and other sources of ignition; high temperature; over charging. |
| **Incompatibility (materials to avoid)** | • Acid:<br>Contact with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulfur trioxide gas, strong oxidizers, and water. Contact with metals may produce toxic sulfur dioxide fumes and may release flammable hydrogen gas.<br>• Lead compounds:<br>Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen, and reducing agents. |
| **Hazardous Decomposition Products** | • Acid:<br>Sulfur trioxide, carbon monoxide, sulfuric acid mist, sulfur dioxide, hydrogen sulfide.<br>• Lead compounds:<br>Temperatures above the melting point are likely to produce toxic metal fume, vapor, or dust; contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas. |
| **Hazardous Polymerization** | Will not occur. |

## 11. TOXICOLOGICAL INFORMATION

**NOTE: Under normal conditions of use, this product does not present a health hazard. The following information is provided for organic electrolyte and lead exposure that may occur due to container breakage or under extreme conditions such as fire.**

**Organic electrolyte – reacts with moisture / water to produce hydrofluoric acid in trace quantities. Hydrofluoric acid is extremely corrosive and toxic. In severe exposures it acts as a systemic poison and causes severe burns. The reaction may be delayed. Any contact with this material, even minor, requires immediate medical attention.**

**ROUTES AND METHODS OF ENTRY**

| | |
|---|---|
| **Inhalation** | • Sulfuric Acid:<br>Breathing of sulfuric acid vapors or mists may cause severe respiratory irritation.<br>• Lead Compounds:<br>Inhalation of lead dust or fumes may cause irritation of upper respiratory tract and lungs. |
| **Skin Contact** | • Sulfuric Acid:<br>Severe irritation, burns and ulceration.<br>• Lead Compounds:<br>Not absorbed through the skin. |
| **Skin Absorption** | In the event of overcharging or damage to the unit, exposure to organic electrolyte solution / mist is possible. Extreme exposures to the organic electrolyte can be absorbed through the skin. |
| **Eye Contact** | • Sulfuric Acid:<br>Severe irritation, burns, cornea damage, and blindness.<br>• Lead Compounds:<br>May cause eye irritation. |
| **Ingestion** | • Sulfuric Acid:<br>May cause severe irritation of mouth, throat, esophagus and stomach.<br>• Lead Compounds:<br>Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping. This may lead rapidly to systemic toxicity and must be treated by a physician. |

**EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.**

**SIGNS AND SYMPTONS OF OVEREXPOSURE**

| | |
|---|---|
| **Acute Effects** | • Sulfuric Acid:<br>Severe skin irritation, damage to cornea, upper respiratory irritation.<br>• Lead Compounds:<br>Symptoms of toxicity include headache, fatigue, abdominal pain, loss of appetite, muscular aches and weakness, sleep disturbances and irritability. |
| **Chronic Effects** | • Sulfuric Acid:<br>Possible erosion of tooth enamel, inflammation of nose, throat & bronchial tubes.<br>• Lead Compounds:<br>Anemia; neuropathy, particularly of the motor nerves, with wrist drop; kidney damage; reproductive changes in males and females. Repeated exposure to lead and lead compounds in the workplace may result in nervous system toxicity. Some toxicologists report abnormal conduction velocities in persons with blood lead levels of 50 µg/100 ml or higher. Heavy lead exposure may result in central nervous system damage, encephalopathy and damage to the blood-forming (hematopoietic) tissues. |

**EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.**

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

Overexposure to sulfuric acid mist may cause lung damage and aggravate pulmonary conditions. Contact of sulfuric acid with skin may aggravate diseases such as eczema and contact dermatitis. Lead and its compounds can aggravate some forms of kidney, liver and neurologic diseases.

**ADDITIONAL HEALTH DATA**

All heavy metals, including the hazardous ingredients in this product, are taken into the body primarily by inhalation and ingestion. Most inhalation problems can be avoided by adequate precautions such as ventilation and respiratory protection covered in Section 8. Follow good personal hygiene to avoid inhalation and ingestion: wash hands, face, neck and arms thoroughly before eating, smoking or leaving the work site. Keep contaminated clothing out of non-contaminated areas, or wear cover clothing when in such areas. Restrict the use and presence of food, tobacco and cosmetics to non-contaminated areas. Work clothes and work equipment used in contaminated areas must remain in designated areas and never taken home or laundered with personal non-contaminated clothing. This product is intended for industrial use only and should be isolated from children and their environment.

The 19th Amendment to EC Directive 67/548/EEC classified lead compounds, but not lead in metal form, as possibly toxic to reproduction. Risk phrase 61: May cause harm to the unborn child, applies to lead compounds, especially soluble forms.

**Toxicological Data**

| **Constituents** | Lead (CAS 7439-92-1) | Sulfuric Acid (CAS 7664-93-9) |
|---|---|---|
| **Species** | Rat | Rat |
| **Test Results** | 1050 ug/kg | 2140 mg/kg |
| **Acute oral toxicity** | TDLo | LD50 |
| **Skin corrosion / irritation** | Electrolyte: Causes severe skin burns | |
| **Serious eye damage / eye irritation** | Electrolyte: Causes severe eye damage | |
| **Respiratory Sensitization** | Not Classified | |
| **Skin Sensitization** | Not a skin sensitizer | |
| **Germ Cell Mutagenicity** | No data available | |

**CARCINOGENICITY**

Under normal handling and storage conditions, the exposure to carcinogenic components is not expected. Risk of adverse effects occurs only if the cell is mechanically, thermally, or electrically abused to the point of compromising the enclosure.

- Sulfuric Acid:
  The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid" as a Category I carcinogen, a substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery. Inorganic acid mist (sulfuric acid mist) is not generated under normal use of this product. Misuse of the product, such as overcharging, may result in the generation of sulfuric acid mist.

- Lead Compounds:
  Lead is listed as a 2B carcinogen, likely in animals at extreme doses. Proof of carcinogenicity in humans is lacking at present.

| **Carcinogenic Effects** | | | |
|---|---|---|---|
| | **CAS Number** | **IARC** | **NTP** |
| Sulfuric acid | 7664-93-9 | Group 1-Carcinogenic | Not established |
| Lead | 7439-92-1 | Group 2B-Possibly carcinogenic to humans. | Reasonably anticipated to be human carcinogen |

- **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 / 1200)**
  Not listed.

| | |
|---|---|
| **Reproductive toxicity** | May damage fertility or the unborn child. |
| **Specific target organ toxicity - single exposure** | No data available. |
| **Specific target organ toxicity - repeated exposure** | Lead: May cause damage to organs (blood, central nervous system) through prolonged or repeated exposure. |
| **Aspiration hazard** | Not classified. |

## *12. ECOLOGICAL INFORMATION*

- **Environmental Fate**
  Lead is very persistent in soil and sediments. No data on environmental degradation. Mobility of metallic lead between ecological compartments is slow. Bioaccumulation of lead occurs in aquatic and terrestrial animals and plants but little bioaccumulation occurs through the food chain. Most studies include lead compounds and not elemental lead.

- **Ecotoxicity**
  Very toxic to aquatic life with long lasting effects. However, no ecological impacts expected under normal use conditions.

| | |
|---|---|
| **Constituents** | Inorganic Lead / Lead Compounds (CAS 7439-92-1) |
| **Species** | Rainbow trout, Donaldson trout (Oncorhynchus mykiss) |
| **Test Results** | 1.17 mg/l, 96 hours |
| **Aquatic** | Fish LC50 |
| **Persistence and Degradability** | No data available |
| **Bioaccumulative potential** | No data available |
| **Additional Information** | No known effects on stratospheric ozone depletion<br>Volatile organic compounds: 0% (by Volume)<br>Water Endangering Class (WGK): NA |

## *13. DISPOSAL CONSIDERATIONS*

| | |
|---|---|
| **Waste disposal method** | Material should be recycled if possible. Lead-acid batteries are completely recyclable. Product can be recycled along with automotive (SLI) lead-acid batteries. Dispose waste and residues in accordance with applicable federal, state, and local regulations. |
| **Hazardous waste code** | D008: Lead |
| **Waste from residues / unused products** | Dispose of in accordance with local regulations. Empty containers or packaging may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| **Contaminated packaging** | Empty containers should be taken to an approved waste handling site for recycling or disposal. |

## *14. TRANSPORT INFORMATION*

**NOTE: Please refer to current shipping paper for most up to date shipping information, including exemptions and special circumstances.**

| | |
|---|---|
| **United States DOT** | Not regulated as dangerous goods per 49 CFR 173.159a |
| **IATA** | Please contact manufacturer for most current information |
| **IMDG** | Not regulated as dangerous goods per exception 238 |

## *15. REGULATORY INFORMATION*

This product is an article pursuant to 29 CFR 1910.1200 and as such is not subjected to the OSHA Hazard Communication Standard.

**TSCA**

Ingredients listed in the TSCA registry are lead, lead compounds, and sulfuric acid.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

| | |
|---|---|
| Lead (CAS 7439-92-1) | Reproductive toxicity<br>Central nervous system<br>Kidney<br>Blood<br>Acute toxicity |

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| Lead (CAS 7439-92-1) | LISTED |
| Sulfuric Acid (CAS 7664-93-9) | LISTED |

**Superfund Amendment and Reauthorization Act of 1986 (SARA)**

| | |
|---|---|
| **Hazard Categories** | Immediate Hazard – Yes<br>Delayed Hazard – Yes<br>Fire Hazard – Yes<br>Pressure Hazard – Yes<br>Reactivity Hazard – Yes |

**SARA 302 Extremely hazardous substance**

| Chemical Name | CAS Number | Weight-% | Reportable Quantity | Threshold Planning Quantity |
|---|---|---|---|---|
| Sulfuric Acid | 7664-93-9 | 30-40 | 1000 lb EPCRA RQ | 1000 lb TPQ |
| Water | 7732-18-5 | 60-70 | Not Listed | Not Listed |

- **Section 311 / 312 Hazard Categorization**

  EPCRA Section 312 Tier Two reporting is required for non-automotive batteries if sulfuric acid is present in quantities of 500 lbs. or more and / or if lead is present in quantities of 10,000 lbs. or more. For more information consult 40 CFR 370.10 and 40 CFR 370.40.

- **Section 313 EPCRA Toxic Substances**

  40 cfr section 372.38 (b) states: If a toxic chemical is present in an article at a covered facility, a person is not required to consider the quantity of the toxic chemical present in such article when determining whether an applicable threshold has been met under § 372.25, § 372.27, or § 372.28 or determining the amount of release to be reported under § 372.30. This exemption applies whether the person received the article from another person or the person produced the article. However, this exemption applies only to the quantity of the toxic chemical present in the article.

| Chemical Name | CAS Number | % by Weight |
|---|---|---|
| Lead | 7439-92-1 | 60-85 |

**Other Federal Regulations**

| | |
|---|---|
| Lead (CAS 7439-92-1) | **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List** |
| Sulfuric Acid (CAS 7664-93-9) | **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)** |

- **Safe Drinking Water Act (SDWA)**
  Not regulated

- **Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**
  Sulfuric Acid (CAS 7664-93-9), 6552

- **Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**
  Sulfuric Acid (CAS 7664-93-9), 20 % WV

- **DEA Exempt Chemical Mixtures Code Number**
  Sulfuric Acid (CAS 7664-93-9), 6552

**US State Regulations**

| | |
|---|---|
| Lead (CAS 7439-92-1)<br>Sulfuric Acid (CAS 7664-93-9) | **US Massachusetts RTK – Substance List** |
| | **US New Jersey Worker and Community Right-to-know Act** |
| | **US Pennsylvania Worker and Community Right-to-know Law** |
| | **US Rhode Island RTK** |

- **US California Proposition 65**
  WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. **Wash hands after handling.**

* Battery companies not party to the 1999 consent judgment with Mateel Environmental Justice Foundation should include a Proposition 65 Warning that complies with the current version of Proposition 65.

- **US California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

| Chemical Name | CAS Number | % by Weight |
|---|---|---|
| Lead | 7439-92-1 | 60-85 |
| Sulfuric Acid | 7664-93-9 | 10-28 |
| Arsenic (as arsenic oxides) | 7440-38-2 | <0.01 |

**International Inventories**

| Country(s) or Region | Inventory Name | On inventory (yes / no)* |
|---|---|---|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*** A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).**
**A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).**

- **Canadian Domestic Substance List (DSL)**
  All ingredients remaining in the finished product as distributed into commerce are included on the Domestic Substances List.
  **WHMIS Classifications**

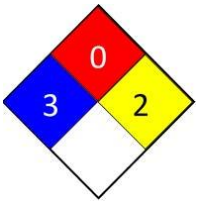
  This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the Controlled Products Regulations.
  **NPRI and Ontario Regulation 127/01**
  This product contains the following chemicals subject to the reporting requirements of Canada NPRI +/or Ont. Reg. 127/01:

| Chemical Name | CAS Number | % by Weight |
|---|---|---|
| Lead | 7439-92-1 | 60-85 |

- **European Inventory of Existing Commercial Chemical Substances (EINECS)**
  All ingredients remaining in the finished product as distributed into commerce are exempt from, or included on, the European Inventory of Existing Commercial Chemical Substances.
  REACH: Contains more than 0.1% lead monoxide. Lead Monoxide (CAS: 1317-36-8) is listed as a substance of very high concern (SVHC) under EU REACH regulation annex XIV.
  **European Communities (EC) Hazard Classification according to directives 67/548/EEC and 1999/45/EC.**

| R-Phrases | S-Phrases |
|---|---|
| 23/25 | 1/2, 20/21, S28 |

## *16. OTHER INFORMATION*

| | |
|---|---|
| **Issue Date** | 06/01/2015 |
| **Revision Date** | - |
| **Version #** | 01 |
| **Further information** | NFPA Hazard Scale:<br>0 = Minimal<br>1 = Slight<br>2 = Moderate<br>3 = Serious<br>4 = Severe |
| **NFPA ratings** |  |

**DISCLAIMER:**
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