

Issue Date: 02-FEB-2015

**Section 1 – Chemical Products and Company Identification****Product name/Product identifier:**

Maintenance Free Sealed Lead Acid Battery

**Model:**

BW-27 AGM, B12-90

**UNID No.:**

Complies with UN2800 Classification

**Details of the supplier safety data sheet:**

Glentronics, Inc.

645 Heathrow Drive

Lincolnshire IL 60069

**Emergency Telephone number:**

Company phone number 800-991-0466

**Emergency Telephone (24 Hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)**Section 2 – HAZARDS IDENTIFICATION****Classification**

Irritation to eyes and skin

Serious eye damage/eye irritation

Causes burns

**Hazards Not Otherwise Classified (HNOC)**

Harmful if swallowed.

This battery has passed the vibration test, pressure differential test and leakage test at 55 degrees C according to recommendations on the transport of dangerous goods model registration (15<sup>th</sup>) special provision 238. It is not restricted to IATA DGR according to special provision A67 and is not restricted to IMDG code according to special provision 238.

**Signal Word**

Danger

**Hazard Statements**

Causes skin burns and severe irritation to eyes

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray

Wear respiratory protection

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Immediately call a poison center or doctor/physician

**Eye Exposure:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call poison control or doctor/physician

**Skin/Hair Exposure:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician

**Swallowed:** Rinse mouth. Do not induce vomiting. Immediately call a poison center or doctor/physician

**Precautionary Statements - Storage**

Store in a cool well ventilated area. Keep away from ignition sources, heat and flame. Batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Materials to avoid: Strong oxidant, combustible materials and corrosives.

**Precautionary Statements - Disposal**

Dispose of item with an approved waste disposal facility

### Section 3 – INFORMATION ON INGREDIENTS

| Ingredient                     | CAS No.         | Concentration |
|--------------------------------|-----------------|---------------|
| Inorganic Lead/Lead Compounds  | 7439-92-1       | ~ 72%         |
| Sulfuric Acid                  | 7664-93-9       | ~ 20%         |
| Fiberglass Separator           | 65997-17-3      | ~ 2%          |
| Container Plastics (ABS or PP) | 9003-56-9 (ABS) | ~ 5%          |
|                                | 9003-07-0 (PP)  |               |

### Section 4 – FIRST-AID MEASURES

**First Aid Measures**

**General Advice**

Provide SDS to medical personnel for treatment

**Eye Contact**

Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call poison control or doctor/physician

**Skin Contact**

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician

**Ingestion**

Rinse mouth. Do not induce vomiting. Immediately call a poison center or doctor/physician

**Most important symptoms and effects**

**Symptoms**

Causes skin burns and severe irritation to eyes

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

**Note to Physician**

Continued washing of the affected area with cold water will be helpful in removing the last traces of sulfuric acid. Creams or ointments should not be applied before or during the washing phase of treatment

### Section 5 – FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**

Dry chemical, sandy soil, carbon dioxide or appropriate foam.

**Unsuitable Extinguishing Media**

Not determined

**Specific Hazards Arising from the Chemical**

Emit toxic fumes under fire conditions

**Protective equipment and precautions for firefighters**

Wear self contained breathing apparatus pressure demand, MSHA/OSHA (approved or equivalent) and full protective gear to prevent contact with skin or eyes.

**Section 6 – ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures:****Personal Precautions**

Wear protective clothing as described in section 8. Ventilate affected area

**Environmental Precautions**

Prevent from entering into the soil, ditches, sewers, waterways and or groundwater. See section 12 for additional information.

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

Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material. Neutralize runoff with lime, soda ash, etc.

**Methods for Clean-Up**

Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

**Prevention of Secondary Hazards**

Material can create slippery conditions.

**Section 7 – HANDLING AND STORAGE****Precautions for Safe Handling****Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Follow all SDS/label precautions even after container is emptied, because it may retain product residues. Do not breathe vapors or spray mist. Do not eat, drink or smoke when handling this product. Use only with adequate ventilation. Wear respiratory protection. Loosen closure carefully; relieve internal pressure when received and at least weekly thereafter. Do not use pressure to empty. Do not wash out container or use it for other purposes. Replace closure after each use.

Keep away from ignition sources, heat and flame. Batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Materials to avoid: Strong oxidant, combustible materials and corrosives.

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

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away from incompatible materials. Store locked up.

Keep away from ignition sources, heat and flame. Batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Materials to avoid: Strong oxidant, combustible materials and corrosives.

**Incompatible Materials**

Vigorous reactions with water; alkaline solutions; metals, metal powder; carbides; chlorates; nitrates; strong oxidizing, reducing, or combustible organic materials. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, and carbides.

## Section 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name              | ACGIH TLV                                    | OSHA PEL                                                       | NIOSH IDLH                                             |
|----------------------------|----------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------|
| Sulfuric Acid<br>7664-93-9 | TWA: 0.2 mg/m <sup>3</sup> thoracic fraction | TWA: 1 mg/m <sup>3</sup><br>(vacated) TWA: 1 mg/m <sup>3</sup> | IDLH: 15 mg/m <sup>3</sup><br>TWA: 1 mg/m <sup>3</sup> |

### Appropriate engineering controls

#### Engineering Controls

Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

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

#### Eye/Face Protection

Use chemical safety goggles and/or a full face shield.

#### Skin and Body Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

#### Respiratory

If the exposure limit is exceeded and engineering controls are not feasible, a full-face respirator with an acid gas cartridge and particulate filter (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P particulate filter. For emergencies or instances where the exposure levels are not known, use a full-face shield positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

#### General Hygiene Considerations

Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

## Section 9 – PHYSICAL/CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                |              |                |                |
|----------------|--------------|----------------|----------------|
| Physical State | Liquid       |                |                |
| Appearance     | Clear liquid | Odor           | Odorless       |
| Color          | Clear        | Odor Threshold | Not determined |

| Property                     | Values                         | Remarks • Method |
|------------------------------|--------------------------------|------------------|
| pH                           | < 1.0                          |                  |
| Melting Point/Freezing Point | 10% - (25°F)<br>51% - (-30°F)  |                  |
| Boiling Point/Boiling Range  | 10% - (210°F)<br>51% - (270°F) |                  |
| Flash Point                  | Will not burn, non-flammable   |                  |
| Evaporation Rate             | < 1.0                          |                  |
| Flammability (Solid, Gas)    | Liquid-not applicable          |                  |
| Upper Flammability Limits    | Not determined                 |                  |
| Lower Flammability Limit     | Not determined                 |                  |

|                                     |                    |               |
|-------------------------------------|--------------------|---------------|
| <b>Vapor Pressure</b>               | < 0.3 mmHg         | @ 25°C (77°F) |
| <b>Vapor Density</b>                | 3.4                | (Air=1)       |
| <b>Specific Gravity</b>             | 1.058-1.409        | @ 60°F        |
| <b>Water Solubility</b>             | Completely soluble |               |
| <b>Solubility in other solvents</b> | Not determined     |               |
| <b>Partition Coefficient</b>        | Not determined     |               |
| <b>Auto-ignition Temperature</b>    | Not combustible    |               |
| <b>Decomposition Temperature</b>    | Not determined     |               |
| <b>Kinematic Viscosity</b>          | Not determined     |               |
| <b>Dynamic Viscosity</b>            | 20°C 25mPas        |               |
|                                     | 0°C 60mPas         |               |
| <b>Explosive Properties</b>         | Not an explosive   |               |
| <b>Oxidizing Properties</b>         | Not determined     |               |

## Section 10 – STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions

Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas, and with cyanides and sulfides to form poisonous hydrogen cyanide and hydrogen sulfide respectively

### Chemical Stability

Stable under ordinary conditions of use and storage. Concentrated solutions react violently with water, spattering and liberating heat.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

### Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources. Heat, moisture, incompatibles. Keep separated from incompatible substances.

### Hazardous Decomposition Products

Releases sulfur dioxide at extremely high temperatures. Toxic fumes of oxides of sulfur when heated to decomposition.

## Section 11 – TOXICOLOGY INFORMATION

### Information on likely routes of exposure

#### **Product Information:**

|                     |                                                                          |
|---------------------|--------------------------------------------------------------------------|
| <b>Eye Contact</b>  | Causes severe eye damage.                                                |
| <b>Skin Contact</b> | Causes severe skin burns.                                                |
| <b>Inhalation</b>   | May cause irritation to the mucus membranes and upper respiratory tract. |
| <b>Ingestion</b>    | May be harmful if swallowed.                                             |

### Component information

| Chemical Name              | Oral LD50          | Dermal LD50 | Inhalation LC50                   |
|----------------------------|--------------------|-------------|-----------------------------------|
| Sulfuric Acid<br>7664-93-9 | = 2140 mg/kg (Rat) | -           | = 510 mg/m <sup>3</sup> (Rat) 2 h |

### **Information on physical, chemical and toxicology effects**

#### **Symptoms**

Please see section 4 of this SDS for symptoms

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

#### **Carcinogenicity**

IARC has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid. Inorganic mist is not generated under normal use of this product.

| Chemical Name              | ACGIH | IARC    | NTP   | OSHA |
|----------------------------|-------|---------|-------|------|
| Sulfuric Acid<br>7664-93-9 | A2    | Group 1 | Known | X    |

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

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

X - Present

#### **Numerical measures of toxicity**

Not determined

## **Section 12 – ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

An environment hazard cannot be excluded in the event of unprofessional handling or disposal.

Lead and its compounds can result in a threat if released into the environment.

In most surface water and groundwater, lead forms compounds out of the water column. Lead may occur as absorbed ions or surface coatings on sediment mineral particles or may be carried in colloidal particles in surface water. Most lead is strongly retained in soil, resulting in little mobility. Lead may be immobilized by ion exchange with hydrous oxides or by chelation with humic or fulvic acids in the soil. Lead (dissolved phase) is bioaccumulated by plants and animals, both aquatic and terrestrial.

#### **Component Information**

| Chemical Name              | Algae/aquatic plants | Fish                                            | Toxicity to microorganisms | Crustacea                           |
|----------------------------|----------------------|-------------------------------------------------|----------------------------|-------------------------------------|
| Sulfuric Acid<br>7667-93-9 |                      | 500: 96 h Brachydanio rerio<br>mg/L LC50 static |                            | 29: 24 h Daphnia magna<br>mg/L EC50 |

#### **Persistence/Degradability**

When released into the soil, this material may leach into groundwater. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition.

#### **Bioaccumulation**

Not determined.

#### **Mobility**

Not determined

#### **Other Adverse Effects**

Not determined

## Section 13 – DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### **Disposal of Wastes:**

Lead-acid batteries are completely recyclable. Return whole scrap batteries to distributor, manufacturer or lead smelter for recycling. Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact local and/or state environmental officials regarding disposal information.

#### **Contaminated Packaging:**

For neutralized spills, place residue in acid-resistant containers with sorbent material, sand or earth and dispose of in accordance with local, state and federal regulations for acid and lead compounds. Contact local and/or state environmental officials regarding disposal information.

### California Hazardous Waste Status

| Chemical Name              | California Hazardous Waste Status |
|----------------------------|-----------------------------------|
| Sulfuric Acid<br>7664-93-9 | Toxic<br>Corrosive                |

## Section 14 – TRANSPORT INFORMATION

### Note:

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

### DOT

|                          |                                                       |
|--------------------------|-------------------------------------------------------|
| UN/ID No                 | UN2800                                                |
| Proper Shipping Name     | Batteries, wet, non-spillable, and electrical storage |
| Hazard Class             | 8                                                     |
| Packing Group            | III                                                   |
| Reportable Quantity (RQ) | 1000 lbs                                              |

### IATA

|                      |                                                       |
|----------------------|-------------------------------------------------------|
| UN/ID No             | UN2800                                                |
| Proper Shipping Name | Batteries, wet, non-spillable, and electrical storage |
| Hazard Class         | 8                                                     |
| Packing Group        | III                                                   |

### IMDG

|                      |                                                       |
|----------------------|-------------------------------------------------------|
| UN/ID No             | UN2800                                                |
| Proper Shipping Name | Batteries, wet, non-spillable, and electrical storage |
| Hazard Class         | 8                                                     |
| Packing Group        | III                                                   |

## Section 15 – REGULATORY INFORMATION

### International Inventories

|        |        |
|--------|--------|
| TSCA   | Listed |
| DSL    | Listed |
| NDSL   | Listed |
| EINECS | Listed |
| ELINCS | Listed |
| ENCS   | Listed |
| KECL   | Listed |
| PICCS  | Listed |
| AICS   | Listed |

### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

## US Federal Regulations

### CERCLA

| Chemical Name              | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                  |
|----------------------------|--------------------------|----------------|-------------------------------------------|
| Sulfuric Acid<br>7664-93-9 | 1000 lb.                 | 1000 lb.       | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire Hazard                       | No  |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | Yes |

### SARA 313

| Chemical Name             | CAS No.   | Weight-% | SARA 313 - Threshold Values % |
|---------------------------|-----------|----------|-------------------------------|
| Sulfuric Acid - 7664-93-9 | 7664-93-9 | 1-51     | 1.0                           |

### CWA (Clean Water Act)

| Component                  | CWA -Reportable Quantities | CWA - Toxic Pollutants | CWA Priority Pollutants | CWA - Hazardous Substances |
|----------------------------|----------------------------|------------------------|-------------------------|----------------------------|
| Sulfuric Acid<br>7664-93-9 | 1000 lb.                   |                        |                         | X                          |

## US State Regulations

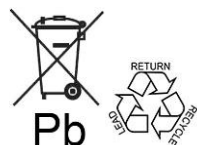
### California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical Name             | California Proposition 65 |
|---------------------------|---------------------------|
| Sulfuric Acid - 7664-93-9 | Carcinogen                |

### U.S. State Right-to-Know Regulations

| Chemical Name              | New Jersey | Massachusetts | Pennsylvania |
|----------------------------|------------|---------------|--------------|
| Sulfuric Acid<br>7664-93-9 | X          | X             | X            |



## Section 16 – OTHER INFORMATION

|                    |                       |                     |                    |                        |
|--------------------|-----------------------|---------------------|--------------------|------------------------|
| <b><u>NFPA</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b> | <b>Special Hazards</b> |
|                    | 3                     | 0                   | 2                  | W                      |
| <b><u>HMIS</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b> | <b>Special Hazards</b> |
|                    | 3                     | 0                   | 2                  | Not Determined         |

**Issue Date:** 02-Feb-2015

**Note:** New format

The Safety Data Sheet (SDS) was generated by the submitted information in accordance with regulation (EC) No.1907/2006, Regulation (EC) No 1272/2008, EU Commission Directive 67/548/EEC, 1999/45/EC, for details please refer to attached pages.

### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**