GLENTRONICS INC

Safety Data Sheet

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 (15th) special provision 238. It is not restricted to IATA DGR according to special provision A67 and is not restricted to IMGD 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 7664-93-9	TWA: 0.2 mg/m3 thoracic fraction	TWA: 1 mg/m3 (vacated) TWA: 1 mg/m3	IDLH: 15 mg/m3 TWA: 1 mg/m3

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)	
	51% - (-30°F)	
Boiling Point/Boiling Range	10% - (210°F)	
	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	

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

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation May cause irritation to the mucus membranes and upper respiratory tract.

Ingestion May be harmful if swallowed.

Component information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric Acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (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 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 my occur 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. Leak (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 7667-93-9		500: 96 h Brachydaniore rerio mg/L LC50 static		29: 24 h Daphnia magna 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 7664-93-9	Toxic 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 7664-93-9	1000 lb.	1000 lb.	RQ 1000 lb final RQ 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 7664-93-9	1000 lb.			X

US State Regulations

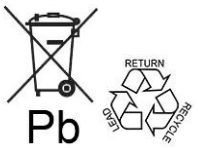
California Proposition 65

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 7664-93-9	X	X	X



Section 16 – OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	3	0	2	W
HMIS	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	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