

# Carefree® Valve Regulated Sealed Lead Acid Battery

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Date of Issue: 01/31/2023

Rev: Orig

### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Carefree® Valve Regulated Sealed Lead Acid Battery

#### 1.2. Intended Use of the Product

Electric Storage Battery

#### 1.3. Name, Address, and Telephone of the Responsible Party

EaglePicher Technologies, LLC

8230 E. 23<sup>rd</sup> St.

Joplin, Missouri 64804, USA

417-624-3167

[inquiry@eaglepicher.com](mailto:inquiry@eaglepicher.com)

[www.eaglepicher.com](http://www.eaglepicher.com)

#### 1.4. Emergency Telephone Number

**Emergency Number** : For Chemical Emergency Call CHEMTREC day or night

Within USA and Canada: 1.800.424.9300

Mexico: 1.800.681.9531

Outside USA and Canada: 1.703.527.3887 (collect calls accepted)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### GHS-US/CA Classification

Corrosive to metals Category 1	H290
Skin corrosion/irritation Category 1B	H314
Serious eye damage/eye irritation Category 1	H318
Carcinogenicity Category 1B	H350
Reproductive toxicity Category 1A	H360
Reproductive toxicity, Additional category, Effects on or via lactation	H362
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity (repeated exposure) Category 1	H372
Hazardous to the aquatic environment - Acute Hazard Category 1	H400
Hazardous to the aquatic environment - Chronic Hazard Category 1	H410

#### 2.2. Label Elements

##### GHS-US/CA Labeling

##### Hazard Pictograms (GHS-US/CA)



##### Signal Word (GHS-US/CA)

: Danger

##### Hazard Statements (GHS-US/CA)

- : H290 - May be corrosive to metals.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H335 - May cause respiratory irritation.
- H350 - May cause cancer.
- H360 - May damage fertility or the unborn child.
- H362 - May cause harm to breast-fed children.
- H372 - Causes damage to organs (CNS, blood, kidneys) through prolonged or repeated exposure (inhalation, oral).
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.

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**Precautionary Statements (GHS-US/CA) :** P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P234 - Keep only in original container.  
P260 - Do not breathe spray, vapors.  
P263 - Avoid contact during pregnancy/while nursing.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, and eye protection.  
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - If exposed or concerned: Get medical advice/attention.  
P321 - Specific treatment (see section 4 on this SDS).  
P363 - Wash contaminated clothing before reuse.  
P390 - Absorb spillage to prevent material-damage.  
P391 - Collect spillage.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P406 - Store in corrosive resistant container with a resistant inner liner.  
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Extremely flammable and potentially explosive hydrogen gas may be generated during charging, heating, or storage. Batteries subjected to abusive charging at excessively high currents for prolonged periods of time without vent caps in place may create a surrounding atmosphere of an offensive strong inorganic acid mist containing sulfuric acid.

### 2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Lead	C.I. Pigment Metal 4 / Lead metal / Lead, elemental / C.I. 77575	(CAS-No.) 7439-92-1	30 – 70	Carc. 1B, H350 Repr. 1A, H360 Lact, H362 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust
Water	water / AQUA	(CAS-No.) 7732-18-5	10 – 30	Not classified
Sulfuric acid	Sulphuric acid / SULFURIC ACID / Hydrogen sulfate / Sulphuric acid ...% / sulfuric acid / Sulfuric acid ...% / Sulfuric acid (H2SO4)	(CAS-No.) 7664-93-9	5 – 25	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402 Aquatic Chronic 2, H411

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Lead oxides	Oxides of lead / Lead compounds, inorganic	(CAS-No.) Variable	1 – 20	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1B, H350 Lact, H362 Repr. 1A, H360 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Plastic casing	None available	(CAS-No.) Variable	1 – 10	Comb. Dust

Full text of H-statements: see section 16

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

The actual concentration of ingredient(s) is variable based on number of charge/discharge cycles and relative level of charge, and is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200.

Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). Full text of H-statements: see section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** Using proper respiratory protection, immediately move the exposed person to fresh air. . Immediately call a poison center or doctor/physician.

**Skin Contact:** Immediately remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Get immediate medical advice/attention.

**Eye Contact:** Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** Causes severe skin burns and eye damage. May cause respiratory irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure. May damage fertility. May damage the unborn child. May cause harm to breast-fed children.

**Inhalation:** Exposure to the internal contents of the battery may result in: Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract.

**Skin Contact:** Exposure to the internal contents of the battery may result in: Causes severe irritation which will progress to chemical burns.

**Eye Contact:** Exposure to the internal contents of the battery may result in: Causes permanent damage to the cornea, iris, or conjunctiva.

**Ingestion:** Exposure to the internal contents of the battery may result in: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** Exposure to the internal contents of the battery may result in: May cause cancer. Causes damage to organs (CNS, blood, kidneys) through prolonged or repeated exposure (oral, inhalation). May damage fertility or the unborn child. Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans. Lead: Exposure can result in weakness, exhaustion, insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; encephalopathy; kidney disease; hypertension. May harm development in children.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

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### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Extremely flammable hydrogen gas can be generated under conditions of storage, heating, transport, or charging; take appropriate precautions.

**Explosion Hazard:** Extremely flammable hydrogen gas could be released under conditions of storage, heating, transport, or charging. Pressure buildup within the battery container could lead to a significant release of pressure, and/or explosion under extreme conditions; take appropriate precautions. Batteries may explode in fire. Damaged batteries can result in rapid heating and the release of flammable vapors. Contact with metallic substances may release flammable hydrogen gas.

**Reactivity:** May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. If batteries are charging, shut off power to the charging equipment. Note that a series of connected batteries may still pose risk of electric shock even when charging equipment is shut down.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapours from decomposition.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Oxides of lead. Hydrogen sulfide. Sulfur oxides. Carbon oxides (CO, CO<sub>2</sub>). Cyanides. Metal oxides. Toxic fumes are released. May release corrosive vapors. Explosive hydrogen gas.

**Other Information:** Do not allow run-off from fire fighting to enter drains or water courses. Beware of acid splatter during water application, utilize appropriate PPE.

### 5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** May be corrosive to metals. May release corrosive vapors. Batteries are designed to be recharged. However, improperly charging may cause the battery to flame. Use only approved chargers and procedures. Never disassemble a battery or bypass any safety device. Do not crush, pierce, short (+) and (-) battery terminals with conductive (i.e. metal) goods. Do not directly heat or solder. Do not throw into fire. Do not mix batteries of different types and brands. Extremely flammable hydrogen gas can be generated under conditions of storage, heating, transport, or charging; take appropriate

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precautions. 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. Single batteries pose low risk of electric shock but there may be increasing risk of electric shock from strings of connected batteries exceeding three 12-volt units. Batteries in operation or being charged will 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. Batteries subjected to abusive charging at excessively high currents for prolonged periods of time without vent caps in place may create a surrounding atmosphere of an offensive strong inorganic acid mist containing sulfuric acid. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Obtain special instructions before use. Avoid contact during pregnancy/while nursing. Do not get in eyes, on skin, or on clothing. Handle empty containers with care because they may still present a hazard.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed. Avoid reversing battery polarity within the battery assembly. To do so may cause cell to flame or to leak. Avoid creating or spreading dust.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in original container or corrosive resistant and/or lined container. Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks. Do not store batteries in a manner that allows terminals to short circuit. Do not place batteries near heating equipment, nor expose to direct sunlight for long periods.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Metals. May be corrosive to metals. Permanganates. Perchlorates/chlorates, Periodates, Halides. Nitrates. Cyanides. Organic materials. Reducing agents. Sulfur trioxide. Halogens. Halogenated compounds. Nitrates/nitrites. Peroxides.

### 7.3. Specific End Use(s)

Electric Storage Battery

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Lead (7439-92-1)		
USA ACGIH	ACGIH OEL TWA	0.05 mg/m <sup>3</sup>
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA ACGIH	BEI (BLV)	200 µg/l Parameter: Lead - Medium: blood - Sampling time: not critical (Note: Persons applying this BEI are encouraged to counsel female workers of child-bearing age about the risk of delivering a child with a PbB (lead in blood level) over the current CDC reference value.)
USA OSHA	OSHA PEL (TWA) [1]	50 µg/m <sup>3</sup>
USA OSHA	OSHA Action Level/Excursion Limit	30 µg/m <sup>3</sup> (Action Level, see 29 CFR 1910.1025)
USA NIOSH	NIOSH REL (TWA)	0.05 mg/m <sup>3</sup>
USA IDLH	IDLH	100 mg/m <sup>3</sup>
Alberta	OEL TWA	0.05 mg/m <sup>3</sup>
British Columbia	OEL TWA	0.05 mg/m <sup>3</sup>
Manitoba	OEL TWA	0.05 mg/m <sup>3</sup>
New Brunswick	OEL TWA	0.05 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA	0.05 mg/m <sup>3</sup>
Nova Scotia	OEL TWA	0.05 mg/m <sup>3</sup>
Nunavut	OEL STEL	0.15 mg/m <sup>3</sup>

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Nunavut	OEL TWA	0.05 mg/m <sup>3</sup>
Northwest Territories	OEL STEL	0.15 mg/m <sup>3</sup>
Northwest Territories	OEL TWA	0.05 mg/m <sup>3</sup>
Ontario	OEL TWA	0.05 mg/m <sup>3</sup> (designated substances regulation) 0.05 mg/m <sup>3</sup> (applies to workplaces to which the designated substances regulation does not apply)
Prince Edward Island	OEL TWA	0.05 mg/m <sup>3</sup>
Québec	VEMP (OEL TWA)	0.05 mg/m <sup>3</sup>
Saskatchewan	OEL STEL	0.15 mg/m <sup>3</sup>
Saskatchewan	OEL TWA	0.05 mg/m <sup>3</sup>
Yukon	OEL STEL	0.45 mg/m <sup>3</sup> (dust and fume)
Yukon	OEL TWA	0.15 mg/m <sup>3</sup> (dust and fume)
<b>Sulfuric acid (7664-93-9)</b>		
USA ACGIH	ACGIH OEL TWA	0.2 mg/m <sup>3</sup> (thoracic particulate matter)
USA ACGIH	ACGIH chemical category	Suspected Human Carcinogen contained in strong inorganic acid mists
USA OSHA	OSHA PEL (TWA) [1]	1 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA)	1 mg/m <sup>3</sup>
USA IDLH	IDLH	15 mg/m <sup>3</sup>
Alberta	OEL STEL	3 mg/m <sup>3</sup>
Alberta	OEL TWA	1 mg/m <sup>3</sup>
British Columbia	OEL TWA	0.2 mg/m <sup>3</sup> (contained in strong inorganic acid mists-thoracic)
Manitoba	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic particulate matter)
New Brunswick	OEL STEL	3 mg/m <sup>3</sup>
New Brunswick	OEL TWA	1 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic particulate matter)
Nova Scotia	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic particulate matter)
Nunavut	OEL STEL	0.6 mg/m <sup>3</sup> (thoracic fraction)
Nunavut	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic fraction)
Northwest Territories	OEL STEL	0.6 mg/m <sup>3</sup> (thoracic fraction, strong acid mists only)
Northwest Territories	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic fraction, strong acid mists only)
Ontario	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic particulate matter)
Prince Edward Island	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic particulate matter)
Québec	VECD (OEL STEL)	3 mg/m <sup>3</sup>
Québec	VEMP (OEL TWA)	1 mg/m <sup>3</sup>
Saskatchewan	OEL STEL	0.6 mg/m <sup>3</sup> (thoracic fraction)
Saskatchewan	OEL TWA	0.2 mg/m <sup>3</sup> (thoracic fraction)
Yukon	OEL STEL	1 mg/m <sup>3</sup>
Yukon	OEL TWA	1 mg/m <sup>3</sup>
<b>Lead compounds (Not Applicable)</b>		
USA NIOSH	NIOSH REL (TWA)	0.05 mg/m <sup>3</sup>
USA IDLH	IDLH	100 mg/m <sup>3</sup>

## 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Gas detectors should be used when flammable gases or vapors may be released. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Face shield.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Corrosion-proof clothing.

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**Hand Protection:** Wear protective gloves where needed by task.

**Eye and Face Protection:** Chemical safety goggles and face shield where needed by task.

**Skin and Body Protection:** Wear suitable protective clothing where needed by task.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Environmental Exposure Controls:** Avoid release to the environment.

**Consumer Exposure Controls:** Avoid contact during pregnancy/while nursing

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid containing liquid components.
Appearance	: Electrolyte: Clear liquid
Odor	: Electrolyte: Sharp, penetrating, pungent odor
Odor Threshold	: <1 (Electrolyte) [Estimate]
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Lower Flammable Limit	: No data available
Upper Flammable Limit	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: >1.0 (Electrolyte at 77 °F/ 25 °C; water = 1)
Specific Gravity	: No data available
Solubility	: Water: 100 % (Electrolyte)
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity:

May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

### 10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Do not use unauthorized charger or charging method. Do not deconstruct or disassemble battery or solder battery. . Do not heat, expose to fire, disassemble, short circuit, immerse in water, or overcharge batteries.

### 10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers. Metals. May be corrosive to metals. Permanganates. Perchlorates/chlorates, Periodates, Halides. Nitrates. Cyanides. Organic materials. Reducing agents. Sulfur trioxide. Halogens. Halogenated compounds. Nitrates/nitrites. Peroxides.

### 10.6. Hazardous Decomposition Products:

Thermal decomposition generates : Corrosive vapors. Oxides of lead. Hydrogen sulfide. sulfur oxides. Nitrogen oxides. Toxic fumes. Metal oxides.

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## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity (Oral):** Not classified

**Acute Toxicity (Dermal):** Not classified

**Acute Toxicity (Inhalation):** Not classified

**LD50 and LC50 Data:**

No additional information available

**Skin Corrosion/Irritation:** Causes severe skin burns.

**pH:** <1 (Electrolyte) [Estimate]

**Eye Damage/Irritation:** Causes serious eye damage.

**pH:** <1 (Electrolyte) [Estimate]

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** May cause cancer.

**Specific Target Organ Toxicity (Repeated Exposure):** Causes damage to organs through prolonged or repeated exposure.

**Reproductive Toxicity:** May damage fertility or the unborn child. May cause harm to breast-fed children.

**Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Exposure to the internal contents of the battery may result in: Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract.

**Symptoms/Injuries After Skin Contact:** Exposure to the internal contents of the battery may result in: Causes severe irritation which will progress to chemical burns.

**Symptoms/Injuries After Eye Contact:** Exposure to the internal contents of the battery may result in: Causes permanent damage to the cornea, iris, or conjunctiva.

**Symptoms/Injuries After Ingestion:** Exposure to the internal contents of the battery may result in: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** Exposure to the internal contents of the battery may result in: May cause cancer. Causes damage to organs (CNS, blood, kidneys) through prolonged or repeated exposure (oral, inhalation). May damage fertility or the unborn child. Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans. Lead: Exposure can result in lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; encephalopathy; kidney disease; hypertension. May harm development in children.

### 11.2. Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>Sulfuric acid (7664-93-9)</b>	
LD50 Oral Rat	2140 mg/kg
<b>Lead oxides (Variable)</b>	
ATE US/CA (oral)	500.00 mg/kg body weight
ATE US/CA (dust, mist)	1.50 mg/l/4h
<b>Lead (7439-92-1)</b>	
IARC Group	2A
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
<b>Sulfuric acid (7664-93-9)</b>	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General:** Very toxic to aquatic life with long lasting effects.

<b>Lead (7439-92-1)</b>	
LC50 Fish 1	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 - Crustacea [1]	600 µg/l (Exposure time: 48 h - Species: water flea)

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LC50 Fish 2	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
<b>Sulfuric acid (7664-93-9)</b>	
LC50 Fish 1	500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 - Crustacea [1]	29 mg/l
LC50 Fish 2	42 mg/l (Exposure time: 96 h - Species: Gambusia affinis [static])
NOEC Chronic Fish	0.025 mg/l

### 12.2. Persistence and Degradability

<b>Carefree® Valve Regulated Sealed Lead Acid Battery</b>	
Persistence and Degradability	May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative Potential

<b>Carefree® Valve Regulated Sealed Lead Acid Battery</b>	
Bioaccumulative Potential	Not established.
<b>Sulfuric acid (7664-93-9)</b>	
BCF Fish 1	(no bioaccumulation)

### 12.4. Mobility in Soil

<b>Carefree® Valve Regulated Sealed Lead Acid Battery</b>	
Ecology - Soil	Not established.

### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

**Ecology - Waste Materials:** Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

### 14.1. In Accordance with DOT

Proper Shipping Name : BATTERIES, WET, NON-SPILLABLE (ELECTRIC STORAGE)  
Hazard Class : 8  
Identification Number : UN2800  
Label Codes : 8  
Marine Pollutant : Marine pollutant  
ERG Number : 154



### 14.2. In Accordance with IMDG

Proper Shipping Name : BATTERIES, WET, NON-SPILLABLE (ELECTRIC STORAGE)  
Hazard Class : 8  
Identification Number : UN2800  
Label Codes : 8  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Marine pollutant : Marine pollutant



### 14.3. In Accordance with IATA

Proper Shipping Name : BATTERIES, WET, NON-SPILLABLE (ELECTRIC STORAGE)  
Hazard Class : 8  
Identification Number : UN2800  
Label Codes : 8  
ERG Code (IATA) : 8L



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## 14.4. In Accordance with TDG

**Proper Shipping Name** : BATTERIES, WET, NON-SPILLABLE (ELECTRIC STORAGE)  
**Hazard Class** : 8  
**Identification Number** : UN2800  
**Label Codes** : 8  
**Marine Pollutant (TDG)** : Marine pollutant



## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

<b>Carefree® Valve Regulated Sealed Lead Acid Battery</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Physical hazard - Corrosive to metals Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Carcinogenicity Health hazard - Reproductive toxicity Health hazard - Specific target organ toxicity (single or repeated exposure)
<b>Lead (7439-92-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	10 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm
<b>SARA Section 313 - Emission Reporting</b>	0.1 %
<b>Sulfuric acid (7664-93-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
<b>CERCLA RQ</b>	1000 lb
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	1000 lb
<b>SARA Section 313 - Emission Reporting</b>	1 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
<b>Lead oxides (Variable)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	

### 15.2. US State Regulations

#### California Proposition 65

 **WARNING:** This product can expose you to Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Lead (7439-92-1)	X	X	X	X
Sulfuric acid (7664-93-9)	X			
Lead oxides (Variable)	X	X	X	X

<b>Lead (7439-92-1)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
<b>Sulfuric acid (7664-93-9)</b>
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

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U.S. - Pennsylvania - RTK (Right to Know) List

### Lead oxides (Variable)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

### 15.3. Canadian Regulations

#### Lead (7439-92-1)

Listed on the Canadian DSL (Domestic Substances List)

#### Sulfuric acid (7664-93-9)

Listed on the Canadian DSL (Domestic Substances List)

#### Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

#### Lead oxides (Variable)

Listed on the Canadian DSL (Domestic Substances List)

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision** : 01/31/2023

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

### GHS Full Text Phrases:

H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H360	May damage fertility or the unborn child
H362	May cause harm to breast-fed children
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

*This SDS is intended to provide a summary of our knowledge and guidance regarding the use of this chemical. The information contained here has been compiled from sources considered by EaglePicher Technologies, LLC to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations. This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. EaglePicher Technologies, LLC assumes no responsibility for injury to the recipient or third persons or for any damage to any property resulting from misuse of the chemical.*