



Safety Data Sheet

Issue Date: 20-Aug-2020

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Version 1

1. IDENTIFICATION

Product identifier

Product Name Electric Storage Battery, Dry

Other means of identification

SDS # BB-002

Synonyms Storage Battery, Dry Battery.

Recommended use of the chemical and restrictions on use

Recommended Use Dry lead-acid storage battery.

Details of the supplier of the safety data sheet

Manufacturer Address

Battery Builders Inc.
31 W238 91st St
Naperville, IL 60564
PO Box 5005
Naperville, IL 60567

Emergency telephone number

Company Phone Number Phone: 630-851-5800
Fax: 630-851-1040
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Industrial/commercial lead acid battery, without electrolyte

Physical state Lead: Solid

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Effects on or via lactation	Yes
Specific target organ toxicity (repeated exposure)	Category 2

Signal Word

Danger

Hazard statements

Harmful if swallowed
Harmful if inhaled
May cause cancer
May damage fertility or the unborn child
May cause harm to breast-fed children
May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood
 Wear protective gloves/protective clothing/eye protection/face protection
 Obtain special instructions before use
 Avoid contact during pregnancy/while nursing
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects
 Very toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Storage Battery, Dry Battery.

Chemical name	CAS No	Weight-%
Lead	7439-92-1	67
Antimony	7440-36-0	1

Chemical Additions *Contains more than 0.1% lead monoxide. Lead Monoxide (CAS No.: 1317-36-8) is listed as a substance of very high concern (SVHC) under EU REACH regulation annex XIV.

Additional Information: Inorganic lead and lead compounds are the primary components, other ingredients (Sn, Cu, As) may be present at concentrations below the applicable reporting threshold and dependent upon battery type.

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If any adverse effect occurs, seek immediate medical attention.

Skin Contact	Wash off immediately with soap and plenty of water.
Inhalation	In case of exposure to lead compounds, remove from exposure, gargle, wash nose and lips. Consult with physician.
Ingestion	Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	Harmful if swallowed. Harmful if inhaled. See Section 11: Toxicological Information of this SDS for more detailed symptoms.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO₂). Foam. Water spray (fog).

Unsuitable Extinguishing Media Do not use water on live electrical circuits. Do not use carbon dioxide directly on cells.

Specific Hazards Arising from the Chemical

Batteries generate flammable hydrogen gas during charging and may increase fire risk in poorly ventilated areas near sparks, excessive heat, or open flames. Thermal shock may cause battery case to crack open. Containers may explode when heated.

Hazardous combustion products Inorganic lead compound is not a combustible material, nor will it explode under conditions of normal use. Molten metals produce fume, vapor and/or dust that may be toxic and/or respiratory irritants. To avoid risk of fire, keep sparks and other sources of ignition away from batteries, do not allow simultaneous metallic contact with positive and negative posts.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions	Use personal protective equipment as required.
Other Information	Lead-acid batteries are recyclable. Contact your Battery Builders representative for recycling information.

Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

Methods for Containment	No health effects are expected related to the normal use of this product. If the article is recycled, lead dust or particulate should be vacuumed (using HEPA filter) or wet swept; minimizing fugitive emissions. Do not use compressed air or dry sweep.
Methods for Clean-Up	Sweep or shovel spilled material and place in a dry, closed approved container for disposal or recycle. Dispose of any non-recyclable materials in accordance with local, state, provincial or federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing and eye/face protection. Obtain special instructions before use. Avoid contact during pregnancy/while nursing. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Batteries should be stored under roof for protection against adverse weather conditions. If battery case is broken, avoid contact with internal components. Place cardboard between layers of stacked batteries to avoid damage and short circuits. Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur and cause battery failure and fire. Protect containers from physical damage to avoid leaks and spills.

Incompatible Materials

Reducing agents. Strong oxidizers. Water. Heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead 7439-92-1	TWA: 0.05 mg/m ³ TWA: 0.05 mg/m ³ Pb	TWA: 50 µg/m ³ TWA: 50 µg/m ³ Pb	IDLH: 100 mg/m ³ IDLH: 100 mg/m ³ Pb TWA: 0.050 mg/m ³ TWA: 0.050 mg/m ³ Pb
Antimony 7440-36-0	TWA: 0.5 mg/m ³ TWA: 0.5 mg/m ³ Sb	TWA: 0.5 mg/m ³ TWA: 0.5 mg/m ³ Sb (vacated) TWA: 0.5 mg/m ³ (vacated) TWA: 0.5 mg/m ³ Sb	IDLH: 50 mg/m ³ IDLH: 50 mg/m ³ Sb TWA: 0.5 mg/m ³ TWA: 0.5 mg/m ³ Sb
Arsenic 7440-38-2	TWA: 0.01 mg/m ³ TWA: 0.01 mg/m ³ As	TWA: 10 µg/m ³ As (vacated) TWA: 0.5 mg/m ³	IDLH: 5 mg/m ³ IDLH: 5 mg/m ³ As Ceiling: 0.002 mg/m ³ 15 min Ceiling: 0.002 mg/m ³ As 15 min
Tin 7440-31-5	TWA: 2 mg/m ³ inhalable particulate matter TWA: 2 mg/m ³ Sn inhalable particulate matter excluding tin hydride and indium tin oxide	TWA: 2 mg/m ³ Sn except oxides (vacated) TWA: 2 mg/m ³ (vacated) TWA: 2 mg/m ³ Sn except oxides	IDLH: 100 mg/m ³ IDLH: 100 mg/m ³ Sn TWA: 2 mg/m ³ TWA: 2 mg/m ³ except Tin oxides Sn

Appropriate engineering controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Chemical resistant protective gloves.

Respiratory Protection

None required under normal use.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Lead: Solid		
Appearance	Industrial/commercial lead acid battery, without electrolyte	Odor	Not determined
Color	Not determined	Odor Threshold	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not determined	
Flash point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	Not determined	
Lower flammability or explosive limits	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	Not determined	
Water Solubility	insoluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization	Hazardous polymerization does not occur.
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Conditions to Avoid

Ignition sources. Prolonged overcharging.

Incompatible materials

Reducing agents. Strong oxidizers. Water. Heat.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO₂). Numerous small hydrocarbon molecules. 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.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Antimony 7440-36-0	= 7 g/kg (Rat)	-	-
Arsenic 7440-38-2	= 15 mg/kg (Rat) = 763 mg/kg (Rat)	-	-
Tin 7440-31-5	= 700 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

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 May cause cancer.

Chemical name	ACGIH	IARC	NTP	OSHA
Arsenic 7440-38-2	A1	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known 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

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

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Unknown Acute Toxicity	0 % of the mixture consists of ingredient(s) of unknown toxicity.
Oral LD50	735.30 mg/kg
ATEmix (inhalation-dust/mist)	2.206 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Lead 7439-92-1		0.44: 96 h Cyprinus carpio mg/L LC50 semi-static 1.17: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.32: 96 h Oncorhynchus mykiss mg/L LC50 static	600: 48 h water flea µg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Lead acid batteries are recyclable when sent to secondary lead smelters. Follow local, State/Provincial, and Federal/National regulations applicable to as-used, end-of-life characteristics to be determined by end-user.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Lead 7439-92-1		Included in waste streams: F035, F037, F038, F039, K002, K003, K005, K046, K048, K049, K051, K052, K061, K062, K069, K086, K100, K176	5.0 mg/L regulatory level	
Antimony 7440-36-0		Included in waste streams: F039, K021, K161, K177		
Arsenic 7440-38-2		Included in waste streams: F032, F034, F035, F039, K031, K060, K084, K101, K102, K161, K171, K172, K176	5.0 mg/L regulatory level	

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Antimony 7440-36-0				Toxic waste waste number K021 Waste description: Aqueous spent antimony catalyst waste from fluoromethanes production.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Lead 7439-92-1	Toxic

Antimony 7440-36-0	Toxic
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14. TRANSPORT INFORMATION

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

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Lead	X	ACTIVE	X	X	X	X	X	X	X
Antimony	X	ACTIVE	X	X	X	X	X	X	X
Polypropylene	X	ACTIVE	X		X	X	X	X	X
Arsenic	X	ACTIVE	X	X	X	X	X	X	X
Calcium	X	ACTIVE	X	X	X	X	X	X	X
Tin	X	ACTIVE	X	X	X	X	X	X	X

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

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Antimony 7440-36-0	5000 lb 10 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ RQ 10 lb final RQ RQ 4.54 kg final RQ
Arsenic 7440-38-2	1 lb		RQ 1 lb final RQ RQ 0.454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	67	0.1
Antimony - 7440-36-0	7440-36-0	1	1.0
Arsenic - 7440-38-2	7440-38-2	<0.01	0.1

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead		X	X	
Antimony		X	X	

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive
Arsenic - 7440-38-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Lead 7439-92-1	X	X	X
Antimony 7440-36-0	X	X	X
Arsenic 7440-38-2	X	X	X
Calcium 7440-70-2	X	X	X
Tin 7440-31-5	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

HMIS**Health Hazards****Flammability****Physical hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

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Revision Note:

New format

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