Safety Data Sheet

According to Hazard Communication Standard (29 CFR 1910.1200)

Maintenance Free Sealed Lead Acid Batteries

Version 2.0

Issue date: 12/6/2024

1. Identification

Product name Maintenance Free Sealed Lead Acid Batteries:
ELA. ELHR series

Synonyms -

CAS # See section 3

Product code -

Product use UPS, EPS, Banks& Financial Markets, Hospitals & Testing Laboratories, Industrial Process Control Facilities, Date & Network Operations Centers, Center Motor Room.

Manufacturer/Supplier

Supplier(Manufacturer): E.L.S.

Address: 114 Galaxy Blvd. Toronto,
On. M9W-4Y6

Contact person(E-mail): bnicol@emergencylighting.ca

Telephone: 416-749-7818 ext 224

Fax: 416-749-8042

Emergency telephone Number: 416-749-7818 ext 224

2. Hazard(s) identification

GHS classification

Physical hazards Not classified

Health hazards Not classified

Environmental hazards Not classified

GHS label elements

Hazard Pictograms No hazard pictogram is used.

Signal word No signal word is used.

Hazard statement Not applicable.

Precautionary statement

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

3. Composition / information on ingredients

Components	CAS#	Percent
Inorganic Lead/Lead Compounds	7439-92-1	65%-75%
Tin	7440-31-5	<0.5%
Calcium	7440-70-2	<0.1%
Dilute Sulfuric Acid	7664-93-9	~20%
Fiberglass Separator	-	~ 5%
Case Material: Acrylonitrile Butadiene Styrene	9003-56-9	~ 5%

4. First-aid Measures

First aid procedures

Eye contact	Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.
Skin contact	If there is any unwell reaction, wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.
Inhalation	If the battery is damaged or exposed, contact the internal components. Lead: Rapidly from the scene, rinse mouth, flush nose and lips. Get medical attention.
Ingestion	Rinse mouth out with water. Seek medical advice immediately.
Notes to physician	Treat symptoms.

5. Fire-fighting measures

Flammable properties	Not available.

Extinguishing media

Suitable extinguishing media	Lead-acid batteries do not burn or are difficult to burn. Use dry powder, carbon dioxide, foam and water mist.
Unsuitable extinguishing media	Do not use water, full water jets on electrically powered circuits.
Firefighting equipment/instructions	Firefighters must wear fire resistant protective equipment and appropriate breathing apparatus. The staff must equip with filter mask (full mask) or isolated breathing apparatus. The staff must wear the clothes which can defense the fire and the toxic gas. Put out the fire in the upwind direction. Remove the container to the open space as soon as possible. Spray water on the containers in the fireplace to keep them cool until finish extinguishment.
Hazardous combustion products	Oxides of carbon. Metal oxides. Irritating fumes.

6. Accidental release measures

Personal precautions	If the battery is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the vapors to dissipate. Avoid skin and eyes contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerated. If leakage of the battery happens, liquid could be absorbed wit sand, earth or other inert substance and contaminated area should be ventilated meantime.
Environmental precautions	Do not allow product to reach sewage system or any water source. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.
Methods for cleaning up	If battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic lined container. Dispose off according to the local law and rules. Avoid leached substances to get into the earth, canalization or waters.

7. Handling and storage

Handling	Always follow the warning information on the batteries and in the manuals of devices. Only use the recommended battery types. Keep batteries away from children. For

devices to be used by children, the battery casing should be protected against unauthorized access. Unpacked batteries shall not lie about in bulk. In case of battery change always replace all batteries by new ones of identical type and brand. Do not swallow batteries. Do not throw batteries into water. Do not throw batteries into fire. Avoid deep discharge. Do not short-circuit batteries Use recommended charging time and current.

Storage The battery is stored in a cool, dry and well-ventilated area. Batteries should be kept indoors to prevent inclement weather. In each layer of the battery cardboard to prevent damage and short circuit.

8. Exposure controls / personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Lead (CAS 7439-92-1)	TWA	0.05 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Tin (CAS 7440-31-5)	PEL	2 mg/m3
Sulphuric Acid (CAS7664-93-9)	PEL	1 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Lead (CAS 7439-92-1)	TWA	0.05 mg/m3	
Tin (CAS 7440-31-5)	TWA	2 mg/m3	
Sulphuric Acid (CAS7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Lead (CAS 7439-92-1)	TWA	0.05 mg/m3
Tin (CAS 7440-31-5)	TWA	2 mg/m3
Sulphuric Acid (CAS7664-93-9)	TWA	1 mg/m3

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Lead (CAS 7439-92-1)	300 µg/l	Lead	Blood	*

* - For sampling details, please see the source document.

Appropriate engineering controls: Use in a well-ventilated area.

Individual protection measures, such as personal protective equipment:

Eye / face protection Use approved chemical work safety goggles or f ace shield, if handling a leaking or rupture battery.

Skin protection When pouring electrolyte into the battery, wear hand-guarded rubber or plastic acid-resistant gloves up to the elbow.

Respiratory protection None required under normal conditions. Use approved chemical work safety goggles or face shield, if handling a leaking or rupture battery.

General hygiene considerations	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

9. Physical and chemical properties

Appearance	
Physical state	Solid
Form	Not available
Color	Not available
Odor	Not available
Odor threshold	Not available
pH	Not available
Vapor pressure	Not available
Melting point/Freezing point	326 °C(CAS#7439-92-1)
initial boiling point and boiling range	> 600 °C(CAS#7439-92-1)
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Explosion limits	Not available
Vapor density	Not available
Relative density	11.45(CAS#7439-92-1)
Solubility (water)	185 mg/L(CAS#7439-92-1)
Partition coefficient	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Specific gravity	Not available
Flammability limits in air, upper, %by volume	Not available
Flammability limits in air, lower, % by volume	Not available
VOC	Not available
Percent volatile	Not available
Other data	
Viscosity	Not available
Upper/lower explosive limits	Not available
Surface tension	Not available

10. Stability and reactivity

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Incompatible materials. Avoid long-term overcharge. Avoid a variety of ignition sources.
Incompatible materials	Exposure to combustible materials and organic materials can cause fire and explosion. Strong reactivity with strong reducing agents, metals, sulfur trioxide gas, strong

oxidizing agents and water. With the metal may produce toxic sulfur dioxide smoke and the release of flammable hydrogen.

Hazardous decomposition products Oxides of carbon. Metal oxides. Irritating fumes.

Possibility of hazardous reactions No dangerous reactions known.

11. Toxicological information

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: Not available

Information on toxicological effects:

Acute toxicity:

Inorganic Lead/Lead Compounds(CAS#7439-92-1):

LD50(Oral, Rat): > 2000 mg/kg bw

LD50(Dermal, Rat): > 2000 mg/kg bw

LC50(Inhalation, Rat): > 5.05 mg/L 4h

Skin corrosion/Irritation: Not classified.

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

12. Ecological information

Toxicity:

Inorganic Lead/Lead Compounds(CAS#7439-92-1):

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	1170 μg/L	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: No known significant effects or critical hazards.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated packaging Lead-acid batteries can be fully recycled. Return the battery to the distributor, manufacturer, or lead factory for recycling.

14. Transport information

DOT

Basic shipping requirements:

UN number	2800
Proper shipping name	BATTERIES, WET, NON-SPILLABLE
Hazard class	8
Packing group	-
Environmental hazards	No

IATA

According to special provision A67, the substance is not subject to IATA DGR.

UN number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	No

IMDG

According to special provision 238, the substance is not subject to IMO IMDG code.

UN number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	No

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Lead (CAS 7439-92-1)	Listed.
Sulphuric Acid (CAS 7664-93-9)	Listed.

SARA 304 Emergency release notification

Sulphuric Acid (CAS 7664-93-9)	1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable Quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Sulphuric Acid	7664-93-9	1000	1000		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Lead	7439-92-1	65%-75%
Sulphuric Acid	7664-93-9	~20%

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Lead (CAS 7439-92-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulphuric Acid (CAS 7664-93-9)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Sulphuric Acid (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Sulphuric Acid (CAS 7664-93-9) 20 %WV

DEA Exempt Chemical Mixtures Code Number

Sulphuric Acid (CAS 7664-93-9) 6552

US state regulations

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Lead (CAS 7439-92-1) Listed: October 1, 1992

Sulphuric Acid (CAS 7664-93-9) Listed: March 14, 2003

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Lead (CAS 7439-92-1) Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Lead (CAS 7439-92-1) Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Lead (CAS 7439-92-1) Listed: February 27, 1987

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.(a))

Lead (CAS 7439-92-1)

Tin (CAS 7440-31-5)

Sulphuric Acid (CAS 7664-93-9)

16. Other information, including date of preparation or last revision

HMIS®ratings Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings Health: 0

	Flammability: 1
	Instability: 0
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
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