



Safety Data Sheet Valve Regulated Lead Acid Battery

Revision Date: 12/13/2024

Section 1. Identification

Product identifier

Product Identity

Valve Regulated Lead Acid Battery

Other means of identification

Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Power sport batteries.
Uses Advised Against Any other not listed above.

Details of the supplier of the safety data sheet

Company Name

Yuasa Battery, Inc.
2901 Montrose Avenue
Laureldale, PA 19605
United States
www.yuasabatteries.com

Emergency

24 hour Emergency Telephone No.

Company Phone Number (610) 929-5781
24 Hour Emergency Phone Number CHEMTREC
Domestic (800) 424-9300
International 1(703) 527-3887

Customer Service:

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Lactation effect;H362

May cause harm to breast-fed children.

Skin corrosion/irritation category 1A;H314

Causes severe skin burns and eye damage.

Serious eye damage / eye irritation, category 1;H318

Causes serious eye damage.

Reproductive toxicity, category 1A;H360

May damage fertility or the unborn child.

Specific target organ toxicity, repeated exposure category 1;H372

Causes damage to organs through prolonged or repeated exposure.

Aquatic toxicity (acute), category 1;H400

Very toxic to aquatic life.

Aquatic toxicity (chronic), category 1;H410

Very toxic to aquatic life with long lasting effects.

Label elements



Danger



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H314 Causes severe skin burns and eye damage.

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.

H410 Very toxic to aquatic life with long lasting effects.

[Prevention]

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust, fume, mist, vapors or spray.

P263 Avoid contact during pregnancy, while nursing.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

[Response]

P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313 IF exposed or concerned: Get medical advice or attention.

P310 Immediately call a POISON CENTER, doctor or physician.

P314 Get Medical advice or attention if you feel unwell.

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

[Storage]

P405 Store locked up.

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per US or Canadian regulations.



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Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Lead CAS Number: 7439-92-1 Synonyms: Lead Compounds (as Pb)i, Lead Compounds (as Pb)	65 - 85	Reproductive toxicity, category 1A;H360D: C ≥ 0,03 % Aquatic toxicity (chronic), category 1;H410 Aquatic toxicity (acute), category 1;H400 Specific target organ toxicity, repeated exposure category 1;H372 Lactation effect;H362	Acute M-Factor: 10 Chronic M-Factor: 100
Sulfuric acid CAS Number: 7664-93-9 Synonyms: Sulfuric acid (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size), Sulphuric acid	10 - 30	Skin corrosion/irritation category 1A;H314: C ≥ 15 % Skin corrosion/irritation category 2;H315: 5 % ≤ C < 15 % Serious eye damage / eye irritation, category 2;H319: 5 % ≤ C < 15 %	-----
Synthetic Resin (PP) CAS Number: Proprietary Synonyms: No available information	7 - 13	Not Classified	-----

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	Do NOT induce vomiting. Rinse mouth and slowly drink several glasses of water. Call a physician. Do NOT give anything by mouth to an unconscious or convulsing person.

Most important symptoms and effects, both acute and delayed

Overview	IMMEDIATE CONCERNS: CAUTION: May cause eye or skin burns. Avoid vapor. POTENTIAL SIDE EFFECTS EYES: Tissue destruction and permanent eye damage may occur if not treated immediately. SKIN: May be corrosive and cause severe burns. INGESTION: Corrosive to mucous membranes of the mouth, esophagus, stomach &
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throat.

INHALATION: Avoid mist, can be a severe irritant.

ACUTE TOXICITY: Eye, skin, lung burning may be caused with exposure to mist. Avoid mist.

TARGET ORGAN STATEMENT: Contains material which may cause damage to gastrointestinal tract and respiratory tract. Treat symptomatically. See section 2 for further details.

Eyes

Causes serious eye damage.

Skin

Causes severe skin burns and eye damage.

Section 5. Fire-fighting measures

Extinguishing media

CO₂, dry chemical, water mist or foam.

Special hazards arising from the substance or mixture

Hazardous decomposition: Lead compounds exposed to high temperatures will likely produce toxic metal fume, vapor or dust; contact with strong acid/base or presence of nascent hydrogen may generate highly toxic arsine gas.

Sulfuric acid: Sulfur oxides (SO_x).

Do not breathe dust, fume, mist, vapors or spray.

Avoid contact during pregnancy, while nursing.

Advice for fire-fighters

If batteries are on charge, shut off power. Do not allow metallic materials to simultaneously contact negative and positive terminals of cells and batteries. Wear a positive pressure self-contained breathing apparatus (SCBA).

Structural firefighters' protective clothing will only provide limited protection.

Lead portion of battery will likely produce toxic metal fume, vapor or dust.

Sulfuric acid in the electrolyte is corrosive to skin and eyes.

ERG Guide No. 154

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Methods and material for containment and cleaning up

In event of a battery rupturing; stop the leak if you can do it without risk. Absorb with earth, sand, or other non-combustible material. Cautiously neutralize spilled liquid. Dispose of in accordance with local, state, and national regulations.



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Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Handle batteries cautiously. Do not tip to avoid spills (if filled with electrolyte). Avoid contact with internal components. Wear protective clothing when filling or handling batteries. Follow manufacturer's instructions for installation and service. Do not allow conductive material to touch the battery terminals. Short circuit may occur and cause battery failure and fire. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Eyewash stations and safety showers should be provided with unlimited water supply. Handle in accordance with good industrial hygiene and safety practice.

See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Batteries should be stored under roof for protection against adverse weather conditions. Place cardboard between layers of stacked batteries to avoid damage and short circuits. Store batteries on an impervious surface.

Storage class: Class 8B: Non-flammable corrosive materials.

Incompatible materials: Sulfuric acid: Contact with combustible and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulfur trioxide, strong oxidizers and water. Contact with metals may product toxic sulfur dioxide fumes and may release flammable hydrogen gas.

Lead compounds: Avoid contact with strong bases, acids, combustible organic materials, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen, reducing agents and water.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
7439-92-1	Lead	OSHA	50 ug/m
		ACGIH	0.05 mg/m ³
		NIOSH	TWA (8-hour) 0.050 mg/m ³
7664-93-9	Sulfuric acid	OSHA	1 mg/m ³
		ACGIH	0.2 mg/m ³ (T) Thoracic Fraction
		NIOSH	TWA 1 mg/m ³
Proprietary	Synthetic Resin (PP)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit



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Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.

Eyes

In laboratory, medical or industrial settings, safety glasses with side shields are highly recommended. The use of goggles or full face protection may be required depending on the industrial exposure setting. Contact a health and safety professional for specific information.

Skin

Wear appropriate gloves. No skin protection is ordinarily required under normal conditions of use. In accordance with industrial hygiene practices, if contact with leaking battery is expected precautions should be taken to avoid skin contact. Under severe exposure or emergency conditions, wear acid-resistant clothing and boots. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Engineering Controls

The health hazard risks of handling this material are dependent on factors, such as physical form and quantity. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels as low as reasonably achievable.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Solid
Color	Clear
Odor	Odorless
Melting point / freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Available Upper Explosive Limit: Not Available
Flash Point	95 °C - 95.555 °C
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
pH	Not Available
Viscosity (cSt)	Not Available
Solubility in Water	Not Available
Partition coefficient n-octanol/water (Log Kow)	Not Available
Vapor pressure (Pa)	10 mmHg



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Relative Density	75.8523-84.2803 lbs/ft3
Vapor Density	1
Evaporation rate (Ether = 1)	Not Available
VOC Content	Not Available
Other information	No other relevant information.

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

Reacts with some bases.

Conditions to avoid

Prolonged overcharge, sources of ignition.

Incompatible materials

Sulfuric acid: Contact with combustible and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulfur trioxide, strong oxidizers and water. Contact with metals may product toxic sulfur dioxide fumes and may release flammable hydrogen gas.

Lead compounds: Avoid contact with strong bases, acids, combustible organic materials, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen, reducing agents and water.

Hazardous decomposition products

Lead compounds exposed to high temperatures will likely produce toxic metal fume, vapor or dust; contact with strong acid/base or presence of nascent hydrogen may generate highly toxic arsine gas.

Sulfuric acid: Sulfur oxides (SOx).

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Lead - (7439-92-1)	> 2,000.00, Rat - Category: NA	> 2,000.00, Rat - Category: NA	No data available.	> 5.05, Rat - Category: NA	No data available.
Sulfuric acid - (7664-93-9)	No data available.	No data available.	No data available.	No data available.	No data available.
Synthetic Resin (PP) - (Proprietary)	No data available.	No data available.	No data available.	No data available.	No data available.



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Carcinogen Data

CAS No.	Ingredient	Source	Value
7439-92-1	Lead	OSHA	Regulated Carcinogen: Yes;
		NTP	Known: No; Suspected: Yes;
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No;
		ACGIH	A3
7664-93-9	Sulfuric acid	OSHA	Regulated Carcinogen: No;
		NTP	Known: Yes; Suspected: No;
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A2 (in strong inorganic acid mists)
Proprietary	Synthetic Resin (PP)	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1A	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	1A	May damage fertility or the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	1	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

Possible routes of entry: No data available.

Symptoms and effects, both acute and delayed:

IMMEDIATE CONCERNS: CAUTION: May cause eye or skin burns. Avoid vapor.

POTENTIAL SIDE EFFECTS

EYES: Tissue destruction and permanent eye damage may occur if not treated immediately.

SKIN: May be corrosive and cause severe burns.

INGESTION: Corrosive to mucous membranes of the mouth, esophagus, stomach & throat.

INHALATION: Avoid mist, can be a severe irritant.

ACUTE TOXICITY: Eye, skin, lung burning may be caused with exposure to mist. Avoid mist.



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TARGET ORGAN STATEMENT: Contains material which may cause damage to gastrointestinal tract and respiratory tract. Treat symptomatically.

Eyes Causes serious eye damage.
Skin Causes severe skin burns and eye damage.

Section 12. Ecological information

Toxicity

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

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Lead - (7439-92-1)	0.11, Oncorhynchus mykiss	0.60,	0.36, Pseudokirchnerella subcapitata
Sulfuric acid - (7664-93-9)	27.00, Lepomis macrochirus	101.00, Daphnia magna	101.00, Desmodesmus subspicatus
Synthetic Resin (PP) - (Proprietary)	No data available.	No data available.	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No data available.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.



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Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN2800	UN2800	UN2800
UN proper shipping name	Batteries, wet, non-spillable, electric storage	Batteries, wet, non-spillable, electric storage	Batteries, wet, non-spillable, electric storage
Transport hazard class(es)	DOT Hazard Class: 8 Sub Class: Not Applicable	IMDG: 8 Sub Class: Not Applicable	Air Class: 8 Sub Class: Not Applicable
Packing group	III	III	III

Environmental hazards

Marine Pollutant: Yes; (Lead)

Special precautions for user

Not Applicable

Note: This product is not regulated for domestic transport by land, air or rail. Under 49 CFR 171.8, individual packages that contain lead metal (<100 micrometers) below the reportable quantity (RQ) are not regulated. Under 49 CFR 171.4, except when transporting aboard a vessel, the requirements of this subchapter specific to marine pollutants do not apply to on-bulk packaging transported by motor vehicles, rail cars and aircrafts.

DOT These batteries have been tested and meet the non-spillable criteria listed in CFR49, 173.159 (d) (3) (i) and (ii). Non-spillable batteries are excepted from CFR 49, Subchapter C requirements, provided that the following criteria are met: 1.) The batteries must be protected against short circuits and securely packaged. 2.) The batteries and their outer packaging must be plainly and durably marked "NON-SPILLABLE" or "NONSPILLABLE BATTERY".

ICAO (air) Yuasa VRLA batteries have been tested and meet the non-spillable criteria listed in IATA Packing Instruction 872 and Special Provision A67. These batteries are accepted from all IATA regulations provided that the battery terminals are protected against short circuits. The words "Not Restricted, as per Special Provision A67" must be included in the description on the Air Waybill.

IATA Yuasa VRLA batteries have been tested and meet the non-spillable criteria listed in IATA Packing Instruction 872 and Special Provision A67. These batteries are accepted from all IATA regulations provided that the battery terminals are protected against short circuits. The words "Not Restricted, as per Special Provision A67" must be included in the description on the Air Waybill.

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).



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Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0007439-92-1	Lead	Yes		ACTIVE
0007664-93-9	Sulfuric acid	Yes		ACTIVE
Proprietary	Synthetic Resin (PP)	No		

EPCRA 302 Extremely Hazardous:

Sulfuric acid

EPCRA 313 Toxic Chemicals:

Lead

Sulfuric acid

Proposition 65 - Carcinogens (>0.0%):

Lead

Proposition 65 - Developmental Toxins (>0.0%):

Lead

Proposition 65 - Female Repro Toxins (>0.0%):

Lead

Proposition 65 - Male Repro Toxins (>0.0%):

Lead

Proposition 65 Label Warning:



WARNING: This product can expose you to chemicals including [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.

Note: Strong inorganic acid mists containing sulfuric acid are listed on the California Proposition 65 Carcinogen List. [Sulfuric acid, in and of itself, is not listed under Proposition 65. However, if one has sulfuric acid, which through its intended use generates an acid mist that in turn contains sulfuric acid that would meet the listing. The term "strong" does not refer to the concentration of the acid, but rather the strength of the acid. The basis for the listing of strong inorganic acid mists containing sulfuric acid was the formal identification by the National Toxicology Program (NTP), in its Ninth Report on Carcinogens, that this chemical mixture is "known to be a human carcinogen." (Public notice available at http://www.oehha.ca.gov/prop65/CRNR_notices/admin_listing/intent_to_list/noil19b4.html.)]

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.



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The full text of the phrases appearing in section 3 is:

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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.

H410 Very toxic to aquatic life with long lasting effects.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

Authored by Quantum SDS: www.sdsquantum.com

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