



Lead-Acid Battery, filled with acid for electrical energy

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 5/24/2024 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Article
Trade name : Lead-Acid Battery, filled with acid for electrical energy
Type of product : Article, A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Electrical storage batteries

1.2.2. Uses advised against

Restrictions on use : All other uses not recommended above

1.3. Details of the supplier of the safety data sheet

Levo-Batterien AG
Vordere Grossmatt 12
4457 Diegten
Switzerland
T +41 61 971 22 00
info@levobatterien.com

1.4. Emergency telephone number

Emergency number : Emergency telephone number : 145
(available 24h, Tox Info Suisse, Zürich; for calls from Switzerland, information in German, French and Italian)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, Category 3	H272
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Carcinogenicity, Category 1A	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 2	H373
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Contains

: Lead compounds (as Pb); Lead dioxide; Sulfuric acid

Hazard statements (CLP)

: H272 - May intensify fire; oxidiser.
H302+H332 - Harmful if swallowed or if inhaled.
H314 - Causes severe skin burns and 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.
H373 - May cause damage to organs (nervous system) through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.
: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 - Keep away from clothing and other combustible materials.
P260 - Do not breathe spray, vapours, mist, gas.
P263 - Avoid contact during pregnancy and while nursing.

Precautionary statements (CLP)

2.3. Other hazards

Other hazards which do not result in classification

: The product is classified as an article and is not hazardous when used according to the recommendations of the manufacturer. The hazard is associated with the content(s) within the product. Under recommended use conditions, the product is non-reactive provided that the integrity remains intact. The potential for exposure should not exist unless the product is exposed to high temperatures or is mechanically, electrically or physically abused/damaged. The contents are classified as hazardous if the product is compromised.

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Lead compounds (as Pb) (7439-92-1)
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Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Lead compounds (as Pb) (7439-92-1)
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Component

Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	Lead compounds (as Pb) (7439-92-1)
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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lead compounds (as Pb) substance listed as REACH Candidate (Lead) substance with a Community workplace exposure limit	CAS-No.: 7439-92-1 EC-No.: 231-100-4 EC Index-No.: 082-013-00-1 REACH-no: 01-2119513221-59	39.7±3	Repr. 1A, H360FD Lact., H362 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sulfuric acid substance with a Community workplace exposure limit	CAS-No.: 7664-93-9 EC-No.: 231-639-5 EC Index-No.: 016-020-00-8	32.6±3	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Carc. 1A, H350 STOT SE 3, H335
Lead dioxide	CAS-No.: 1309-60-0 EC-No.: 215-174-5	19.5±1.5	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Repr. 1A, H360 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Other components	-	8.2±0.7	Not classified

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
Lead compounds (as Pb)	CAS-No.: 7439-92-1 EC-No.: 231-100-4 EC Index-No.: 082-013-00-1 REACH-no: 01-2119513221-59	(0.03 ≤ C ≤ 100) Repr. 1A, H360D
Sulfuric acid	CAS-No.: 7664-93-9 EC-No.: 231-639-5 EC Index-No.: 016-020-00-8	(5 ≤ C < 15) Skin Irrit. 2, H315 (5 ≤ C < 15) Eye Irrit. 2, H319 (15 ≤ C ≤ 100) Skin Corr. 1A, H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: The following first aid measures are required only in case of exposure to interior battery components after damage of the external battery casing. Undamaged, closed batteries do not represent a danger to the health. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Immediately call a POISON CENTER/doctor.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: Highly corrosive to skin.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: If batteries are on charge, turn off power. It is recommended to monitor the temperature frequently to detect any potential new heat generation. In the instance that a thermal event reoccurs, follow the same firefighting methods.
Hazardous decomposition products in case of fire	: Exposures to high temperatures, sparks and flames can result from the liberating flammable and toxic gases with eventual product ignition. Can emit highly toxic fumes when heated. Combustion can produce carbon dioxide and carbon monoxide. Will release an explosive hydrogen/oxygen gas mixture. Oxides of lead, lead and/or lead compounds may be released. Sulphury Acid may release Sulphur Dioxide and/or Sulphur Trioxide.

5.3. Advice for firefighters

Precautionary measures fire	: Eliminate all ignition sources if safe to do so. Keep cool. Protect from sunlight.
Firefighting instructions	: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. No action shall be taken without appropriate training or involving any personal risk. Move containers from fire area if it can be done without personal risk. Use extinguishing media appropriate for surrounding fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus and chemically protective clothing. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate the danger area. If outdoors, move to an area upwind of the danger area. Do not touch or walk on the spilled product. Avoid contact with skin, eyes and clothing. If possible without taking personal risks, ventilate area, remove ignition sources. Prevent other non-emergency personnel from entering the danger area.

6.1.2. For emergency responders

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate personnel to a safe area. Stop leak if safe to do so. Do not touch spilled material. Consider the risk of potentially explosive atmospheres. All equipment used when handling the product must be grounded. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.2. Environmental precautions

Do not let the product reach soil, drains, sewers, or surface and ground water.

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6.3. Methods and material for containment and cleaning up

- For containment : Do not touch or walk on the spilled product. Neutralize with : Dry chemical, soda ash or lime.
- Methods for cleaning up : Spill area may be slippery. Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spill product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Follow user manual. Do not allow contact with water. Ensure good ventilation of the work station. Eliminate all ignition sources if safe to do so. Do not subject to grinding, shock, friction. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Only connect the battery when it is going to be used. Never use the battery for any other purpose than for that which it has been designed. Avoid direct conductive connection across positive and negative terminals to prevent short circuit.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a cool, well-ventilated place. Protect from moisture. Protect from sunlight. Storage temperature: Minimum: -28 °C for fully charged batteries, -6 °C for completely discharged batteries. Maximum: 26 °C for low self-discharge but up to 38 °C is safe.
- Incompatible products : Oxidizing agents. Strong acids. Strong bases.
- Incompatible materials : Combustible materials.
- Storage area : Place cardboard between layers of stacked batteries as to prevent accidental contact between terminals and/or other damage to terminals or containers. Whenever feasible, store on shipping pallet or rack. Do not stack loaded pallets or racks on top of other batteries.

Switzerland

- Storage class (LK) : LK 8 - Corrosive materials

7.3. Specific end use(s)

Electrical storage batteries.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Lead compounds (as Pb) (7439-92-1)	
EU - Binding Occupational Exposure Limit (BOEL)	
Local name	Inorganic lead and its compounds
BOEL TWA	0.15 mg/m ³
Regulatory reference	DIRECTIVE (EU) 2022/431 (amending Directive 2004/37/EC)
EU - Biological Limit Value (BLV)	
Local name	Lead and its inorganic compounds

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Lead compounds (as Pb) (7439-92-1)	
BLV	30 µg/100ml Parameter: Pb
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs
Switzerland - Occupational Exposure Limits	
Local name	Plomb et ses composés (sauf les alcoylés) / Blei und seine Verbindungen (ausser Alkylverbindungen)
MAK (OEL TWA)	0.1 mg/m ³ (i) / (e)
KZGW (OEL STEL)	0.8 mg/m ³ (i) / (e)
Notation	C2, R1 _A , SS _B , B / C2, R1 _A , SS _B , B
Remark	HSE, NIOSH. Exprimé en Pb / HSE, NIOSH. Als Pb berechnet
Regulatory reference	www.suva.ch, 01.01.2024
Switzerland - BAT	
Local name	Plomb et ses composés (sauf les alcoylés) / Blei und seine Verbindungen (ausser Alkylverbindungen)
BAT	100 µg/l (0.48 µmol/l; Paramètre biologique: Plomb (femmes < 45 ans); Substrat d'examen: Sang complet; Moment du prélèvement: Indifférent.) / (0.48 µmol/l; Biologischer Parameter: Blei (Frauen < 45 Jahre); Untersuchungsmaterial: Vollblut; Probennahmezeitpunkt: Keine Beschränkung.) 400 µg/l (1.93 µmol/l; Paramètre biologique: Plomb (hommes; femmes > 45 ans); Substrat d'examen: Sang complet; Moment du prélèvement: Indifférent.) / (1.93 µmol/l; Biologischer Parameter: Blei (Männer; Frauen > 45 Jahre); Untersuchungsmaterial: Vollblut; Probennahmezeitpunkt: Keine Beschränkung.)
Remark	Influence de l'environnement. / Umwelteinflüsse.
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte
Sulfuric acid (7664-93-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Sulphuric acid (mist)
IOEL TWA	0.05 mg/m ³
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
Switzerland - Occupational Exposure Limits	
Local name	Acide sulfurique / Schwefelsäure
MAK (OEL TWA)	0.1 mg/m ³ (i) / (e)
KZGW (OEL STEL)	0.2 mg/m ³ (i) / (e)
Notation	C1 [#] _A , SS _C / C1 [#] _A , SS _C
Remark	IFA, NIOSH, OSHA. Pas de risque accru de cancer si la VME est respectée / IFA, NIOSH, OSHA. Kein erhöhtes Krebsrisiko bei Einhalten des MAK-Werts
Regulatory reference	www.suva.ch, 01.01.2024

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

The following personal protective equipment is to be used in the event product is compromised. Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:

Long sleeved protective clothing. Acid-resistant clothing

Hand protection:

Wear protective gloves. Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Acid-resistant protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:

In case of inadequate ventilation, wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Silver.
Appearance	: The entire battery is an item consisting of a plastic case with two protruding lead terminals.
Odour	: Odorless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable

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Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

At high temperature may liberate dangerous gases.

10.3. Possibility of hazardous reactions

Damage to the container may cause leakage of contents. Contents may leak or ignite due to temperature rise.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Can emit highly toxic fumes when heated. Combustion can produce carbon dioxide and carbon monoxide. Will release an explosive hydrogen/oxygen gas mixture. Oxides of lead, lead and/or lead compounds may be released. Sulphury Acid may release Sulphur Dioxide and/or Sulphur Trioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Inhalation:dust,mist: Harmful if inhaled.

Lead compounds (as Pb) (7439-92-1)

LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 5.05 mg/l air

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Sulfuric acid (7664-93-9)

LD50 oral rat	2140 mg/kg bodyweight
LC50 Inhalation - Rat	0.375 mg/l air

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.

Sulfuric acid (7664-93-9)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity	: May damage fertility or the unborn child. May cause harm to breast-fed children.
STOT-single exposure	: May cause respiratory irritation.

Sulfuric acid (7664-93-9)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure	: May cause damage to organs (nervous system) through prolonged or repeated exposure.
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Lead dioxide (1309-60-0)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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Aspiration hazard	: Not classified
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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Lead compounds (as Pb) (7439-92-1)

LC50 - Fish [1]	1170 µg/l
LC50 - Fish [2]	107 µg/l

Sulfuric acid (7664-93-9)

LC50 - Fish [1]	16 – 28 mg/l
EC50 - Crustacea [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l
NOEC (chronic)	0.15 mg/l
NOEC chronic fish	0.31 mg/l

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Lead compounds (as Pb) (7439-92-1)

Persistence and degradability	Not rapidly degradable
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Lead dioxide (1309-60-0)

Persistence and degradability	Not rapidly degradable
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Sulfuric acid (7664-93-9)

Persistence and degradability	Not rapidly degradable
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Other components

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Lead compounds (as Pb) (7439-92-1)
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Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Lead compounds (as Pb) (7439-92-1)
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12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations. The battery should not be released to the environment, so they should be recycled wherever possible or be disposed of as hazardous waste at an appropriate hazardous waste collection site.
Waste treatment methods	: Batteries are not to be treated as ordinary trash. Do not dissect, pierce, crush or treat similarly. Dispose of contents/container in accordance with licensed collector's sorting instructions. Must follow special treatment according to local regulation.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal.
Additional information	: Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries.
Ecological information	: Avoid release to the environment.






SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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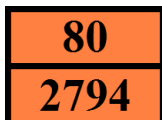
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ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 2794	UN 2794	UN 2794	UN 2794	UN 2794
14.2. UN proper shipping name				
BATTERIES, WET, FILLED WITH ACID	BATTERIES, WET, FILLED WITH ACID	Batteries, wet, filled with acid	BATTERIES, WET, FILLED WITH ACID	BATTERIES, WET, FILLED WITH ACID
Transport document description				
UN 2794 BATTERIES, WET, FILLED WITH ACID, 8, (E)	UN 2794 BATTERIES, WET, FILLED WITH ACID, 8	UN 2794 Batteries, wet, filled with acid, 8	UN 2794 BATTERIES, WET, FILLED WITH ACID, 8	UN 2794 BATTERIES, WET, FILLED WITH ACID, 8
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C11
Special provisions (ADR) : 295, 598
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P801
Transport category (ADR) : 3
Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP8
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E

Transport by sea

Special provisions (IMDG) : 295
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E0
Packing instructions (IMDG) : P801
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW16
Segregation (IMDG) : SGG1, SG36, SG49

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Properties and observations (IMDG) : Metal plates immersed in acid electrolyte in a glass, hard rubber or plastics receptacle. When electrically charged, may cause fire through short-circuiting of terminals. Acid electrolyte is corrosive to most metals. Cause burns to skin, eyes and mucous membranes. Used batteries being transported for disposal or reclamation should be carefully checked prior to shipment to ensure the integrity of each battery and its suitability for transport.

Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : 870
PCA max net quantity (IATA) : 30kg
CAO packing instructions (IATA) : 870
CAO max net quantity (IATA) : 400kg
ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C11
Special provisions (ADN) : 295, 598
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E0
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C11
Special provisions (RID) : 295, 598
Limited quantities (RID) : 1L
Excepted quantities (RID) : E0
Packing instructions (RID) : P801
Transport category (RID) : 3
Special provisions for carriage – Bulk (RID) : VC1, VC2, AP8
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not applicable.

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations above or equal to 0.1 %: Lead (EC 231-100-4, CAS 7439-92-1)

PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): Lead (7439-92-1), lead dioxide (1309-60-0)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Lead-Acid Battery, filled with acid for electrical energy

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

ANNEX I RESTRICTED EXPLOSIVES PRECURSORS

List of substances which are not to be made available to, or introduced, possessed or used by, members of the general public, whether on their own or in mixtures or substances that include those substances, unless the concentration is equal to or lower than the limit values set out in column 2, and for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name	CAS-No.	Limit value	Upper limit value for licensing under Article 5(3)	Combined Nomenclature (CN) code for a separate chemically defined compound meeting the requirements of Note 1 to Chapter 28 or 29 of the CN, respectively	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Sulphuric acid	7664-93-9	15 % w/w	40 % w/w	ex 2807 00 00	ex 3824 99 96

Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Sulphuric acid		7664-93-9	2807 00 00	Category 3		Annex I

15.1.2. National regulations

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Switzerland

Chemicals Ordinance (ChemV, SR 813.11) : Group 1

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H272	May intensify fire; oxidiser.

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Full text of H- and EUH-statements:

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H360D	May damage the unborn child
H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Met. Corr. 1	Corrosive to metals, Category 1
Ox. Sol. 3	Oxidising Solids, Category 3
Repr. 1A	Reproductive toxicity, Category 1A
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.