

PRODUCT INFORMATION SHEET

Prepared in the format conforming to the Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ of EU no L132 of 29 May 2015)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Lead-Acid Battery – Wet Filled With Acid

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

Identified uses: Lead-acid battery – article.

Uses advised against: Not identified.

1.3 Details of the supplier of the product information sheet:

Supplier:

ZAP SZNAJDER BATTERIEN S.A.

47 Warszawska Str.

05-820 Piastów, Poland

Phone:+ 48 22 723 60 11 ext. 237

Fax:+ 48 22 723 65 20

E- mail address: s-gasiniak@zap.pl

1.4 Emergency telephone number

Emergency telephone number **in Poland: + 48 22 723 60 11**

Date of compilation: 24.02.2020 r.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The product is an article within the meaning of the definition contained in the REACH regulation. Therefore, a product information sheet is not required. As a whole (the article) does not pose a threat to human health and the environment.

In the event of the article tearing, unsealing or corroding, the following hazards resulting from the classification of the mixture - ingredients inside the packaging (see Section 3 of the product information sheet) are possible:

Reproductive toxicity, Hazard Category 1A (Repr. 1A)

May damage fertility. May damage the unborn child. (H360FD)

Reproductive toxicity, Additional category, Effects on or via lactation (Lact.)

May cause harm to breast-fed children. (H362)

Carcinogenicity, Hazard Category 2 (Carc. 2)

Suspected of causing cancer. (H351)

Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 4 (Acute Tox. 4)

Harmful if swallowed or if inhaled. (H302+H332)

Specific target organ toxicity — Repeated exposure, Hazard Category 1 (STOT RE 1)

Causes damage to organs (central nervous system, kidneys, hematopoietic system) through prolonged or repeated exposure (inhalation, oral). (H372)

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Skin corrosion/irritation, Hazard Category 1, Sub-Category 1A (Skin Corr. 1A)

Causes severe skin burns and eye damage. (H314)

Serious eye damage/eye irritation, Hazard Category 1 (Eye Dam.1)

Causes serious eye damage. (H318)

Hazardous to the aquatic environment — Acute Hazard, Category 1 (Aquatic Acute 1)

Very toxic to aquatic life. (H400)

Hazardous to the aquatic environment — Chronic Hazard, Category 1 (Aquatic Chronic 1)

Very toxic to aquatic life with long lasting effects. (H410)

Harmful effects on human health:

The product's components are contained in hermetically sealed containers that do not pose a hazard under normal conditions of use. In the event of tearing, unsealing or corrosion of the container, its contents have a locally corrosive effect. May cause burns to the skin, conjunctiva, and cornea of the eye. Irritation of mucous membranes and respiratory system characterized by scratching in the throat and coughing may occur. If swallowed, there is a risk of burns to the mouth, throat, gastrointestinal tract and perforation of the stomach walls. Symptoms: nausea, vomiting, severe pain. May damage fertility. May damage the unborn child. May cause harm to breast-fed children. Suspected of causing cancer.

Environmental effects:

Very toxic to aquatic life with long lasting effects.

Adverse effects associated with physico-chemical properties:

The product has a very low pH. Neutralization before being directed to the sewage treatment plant is necessary.

2.2 Label elements

Pictograms: Not required

Signal Word: Not required

Hazard Statement: Not required

Precautionary Statement: Not required

NOTE!!! In accordance with the REACH Regulation, a product is considered an article, therefore is not subject to labeling obligations.

2.3 Other hazards

The criteria described in Annex XIII (PBT and vPvB properties) do not apply to inorganic substances.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Product identifier: Battery

Mixture components:

Substance name	Index no.	CAS no.	EC no.	% mass fraction	Classification according to the Regulation (EC) No 1272/2008	
					Hazard Classes and Category Codes	Hazard statement codes
Lead tetraoxide*	082-001-00-6	1314-41-6	215-235-6	0 - < 70	Repr. 1A Lact. Carc. 2 Acute Tox. 4 Acute Tox. 4 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	H360Df H362 H351 H332 H302 H372 H400 H410

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Sulphuric acid (VI) Registration No.: 01-2119458838-20-XXXX	016-020-00-8	7664-93-9	231-639-5	0 - 27	Skin Corr. 1A	H314
Lead massive: [particle diameter ≥ 1 mm] ** *** Registration No.: 01-2119513221-59-XXXX	082-014-00-7	7439-92-1	231-100-4	> 10	Repr. 1A Lact. STOT RE 1	H360FD H362 H372
Lead monoxide* Registration No.: 01-2119531110-62-XXXX	082-001-00-6	1317-36-8	215-267-0	0 - > 10	Repr. 1A Lact. Carc. 2 Acute Tox. 4 Acute Tox. 4 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	H360Df H362 H351 H332 H302 H372 H400 H410
Lead (II) sulphate	082-001-00-6	7446-14-2	231-198-9	0 - 10	Repr. 1A Lact. Carc. 2 Acute Tox. 4 Acute Tox. 4 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	H360Df H362 H351 H332 H302 H372 H400 H410
Pentalead tetraoxide sulphate * Registration No.: 01-2119534590-43-XXXX	082-001-00-6	12065-90-6	235-067-7	0 - < 10	Repr. 1A Lact. Carc. 2 Acute Tox. 4 Acute Tox. 4 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	H360Df H362 H351 H332 H302 H372 H400 H410
Tetralead trioxide sulphate* Registration No.: 01-2119517576-34-XXXX	082-001-00-6	12202-17-4	234-853-7	0 - < 10	Repr. 1A Lact. Carc. 2 Acute Tox. 4 Acute Tox. 4 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	H360Df H362 H351 H332 H302 H372 H400 H410

The product also includes a separator of battery plates (silica + PE) and housing + polypropylene cover.

* Lead tetraoxide, Lead monoxide, Pentalead tetraoxide sulphate, Tetralead trioxide sulphate are listed on the Candidate List of Substances of Very High Concern (SVHC) - date of entry: 19/12/2012.

These substances can be used in batteries by consumers on the EU market.

** Lead is listed on the Candidate List of Substances of Very High Concern (SVHC) - date of entry: 27/06/2018.

*** In accordance with art. 7 par. 2 of the REACH Regulation the substance in article should be notified to ECHA no later than 6 months from the date of inclusion in the Candidate List.

Information to be reported in accordance with art. 7 par. 2, include the following data:

- name and contact details of the manufacturer or importer of the product,
- registration number of the substance, if available,
- the identity of the SVHC substance (this information is available on the candidate list and in the accompanying documentation),
- classification of the substance (this information is available on the candidate list and in the accompanying documentation),
- a brief description of the use (-s) of the substance in the article, as specified in section 3.5 of Annex VI, and uses of the article,
- the tonnage band for the substance contained in the product, i.e. 1-10 tons, 10-100 tons, 100-1000 tons or ≥1000 tons.

Full text of H statements, hazard classes and category codes have been specified in the Section 16 of this product information sheet.

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- Inhalation:** Exposure occurs when the product is damaged: remove casualty from exposure site to fresh air, place in reclining or sitting position, keep at rest and protect against heat loss. If breathing disorders occur, apply artificial respiration. If symptoms persist, call a physician.
- Skin contact:** Exposure occurs when the product is damaged: rinse immediately with plenty of water, remove contaminated clothing, wash skin with plenty of water and soap. Consult a physician if necessary.
- Eye contact:** Exposure occurs when the product is damaged: rinse immediately with copious amount of lukewarm water for at least 15 min. Remove contact lenses. To avoid cornea damage, don't use jet stream. If the irritation persists, consult an ophthalmologist.
- Ingestion:** Exposure occurs when the product is damaged: if swallowed, don't provoke vomiting. Rinse mouth with plenty of water. If the victim is conscious, give plenty of water to drink. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

The product's components are contained in hermetically sealed containers that do not pose a hazard under normal conditions of use. In the event of tearing, unsealing or corrosion of the container, its contents have a locally corrosive effect. May cause burns to the skin, conjunctiva, and cornea of the eye. Dust may cause irritation of the respiratory tract, nasal mucosa and oral mucosa, occurrence of "metallic fever". If swallowed, there is a risk of burns to the mouth, throat, gastrointestinal tract and perforation of the stomach walls. Symptoms: nausea, vomiting, severe pain. Lead and lead compounds can cause abdominal pain, diarrhea, loss of appetite, metallic taste in the mouth, nausea, vomiting, fatigue, insomnia, muscle weakness, joint and muscle pain, excitability, headaches and dizziness. Red blood cells can be damaged, causing anemia. There may also be gastritis and damage to the kidneys, liver, female sex glands and the central nervous system. Penetration of lead and its inorganic compounds into the body takes place only by inhaling lead particles. Lead in the body is cumulative. Toxic effects of lead on the human body are called the lead poisoning. The absorbed lead compounds pass into the blood circulation, where lead builds up into the red blood cells - the average residence time is 30 days. From there 25-40% of its content penetrates into soft tissues, about 15% into the bone, and the remaining amount is excreted. The time of residence in soft tissues is about 30 days, and in the bones of 40-90 years in an adult human. In bones it is accumulated in the form of colloidal and crystalline compounds, it can be released from them under the influence of metabolic disturbances or stress. The level and symptoms of chronic lead poisoning depend on the size and duration of the exposure to lead. There are uncharacteristic general symptoms: it affects the circulatory system and the nervous system, causes more and more lack of appetite, intestinal colic, pain in the joints and limbs, weight loss, kidney damage, balance disorders, anxiety, headaches, hallucinations, blurred vision.

4.3 Indication of any immediate medical attention and special treatment needed

The workplace should be equipped with a shower and an eye rinse station. Provide the assisting physician with this product information sheet. If ingested, administer orally 10% solution of sodium thiosulphate or 10% magnesium sulphate solution and milk, fresh protein, albumin solution. As part of the treatment process, it is advisable to eat a large amount of grated fruit, raw liver and use of sulfur baths with an admixture of sodium thiosulphate.

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Non-flammable product. Use extinguishing media that are appropriate for the media involved in the fire. Containers exposed to fire should be cooled from a safe distance with water spray (danger of product tearing and release of hazardous components), if possible, remove them from the endangered area

Unsuitable extinguishing media: Do not use a solid water jet.

5.2 Special hazards arising from the substance or mixture

During fire, lead and lead oxides fumes as well as sulfur oxides are formed.

5.3 Advice for firefighters

Antistatic gas-tight protective suit, self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate general and local ventilation. Due to the corrosive effect of sulphuric acid, use acid-resistant clothing, non-slip leather shoes, acid-resistant gloves or acid-resistant apron, rubber boots and face protection or safety goggles. Protect sink basins. Avoid direct contact with the mixture. Do not drink, eat or smoke during use. Remove unprotected people from the danger zone. Avoid direct contact with the contents of a damaged or open battery.

6.2 Environmental precautions

Protect from releasing to sewage system, surface and ground water, soil.

6.3 Methods and materials for containment and cleaning up

A leak is possible from a damaged or open battery. Secure sink basins. Small amounts of spilled liquid should be covered with non-flammable absorbent material (preferably ground limestone), collected in a closed, acid-proof container. Transfer to a designated waste recipient. Use a neutralizing agent (diluted sodium hydroxide, calcium carbonate or sodium carbonate). Rinse the contaminated surface thoroughly with water.

6.4 Reference to other sections

Remove according to the recommendations listed in the section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not open, disassemble, crush or burn the battery. It is recommended to take special precautions to avoid contact with skin and eyes when working with an open or damaged product. Do not breathe vapours. Protect from releasing to sewage system, water courses and soil. Do not eat, drink or smoke while handling. Wash hands during intervals and after finishing work. Take off contaminated clothing and wash it before reusing.

7.2 Conditions for safe storage, including any incompatibilities

Protect against water and moisture. Do not open the battery, do not expose it to damage or fall. Protect the battery from rain, do not immerse it in liquid - danger of short circuit. Protect from sunlight. Protect from fire and excessive heat. Do not charge or use a damaged, broken or deformed battery.

7.3 Specific end use(s)

No information about the applications other than those mentioned in subsection 1.2.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Controls parameters

Component	CAS-no.	Parameter	value	unit
Sulphuric acid (mist)	7664-93-9	WEL -8-hr TWA ¹	0,05	mg/m ³
The mist is defined as the thoracic fraction.				

¹ [EH40/2005 Workplace exposure limits Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended)]

Lead compounds:

DNEL (long-term exposure) – 40 µg Pb/dL blood (workers - men);
DNEL (long-term exposure) – 30 µg Pb/dL blood (workers - women);
DNEL (long-term exposure) – 10 µg Pb/dL blood (workers – pregnant women);
DNEL (long-term exposure) – 20 µg Pb/dL blood (general population);
DNEL (long-term exposure) – 10 µg Pb/dL blood (general population – pregnant women).
PNEC (surface waters) – 6,5 µg/l
PNEC (marine water) – 3,4 µg/l
PNEC (sediment– surface water) – 174 mg/kg dw.
PNEC (sediment – marine water) – 164,2 mg/kg dw
PNEC (soil) – 147 mg/kg dw.
PNEC (sewage treatment plant) – 0,1 mg/l

8.2 Exposure controls

8.2.1 *Appropriate engineering controls*

Necessary local exhaust ventilation and general ventilation of the room. Suction inlets of local ventilation should be placed at the height of work plane or below. Uptake ventilators of general ventilation should be placed at the top of the room and near the floor. In case of insufficient ventilation wear respiratory protection. Provide shower and eye wash station.

8.2.2 *Individual protective measures such as personal protective equipment*

Respiratory protection: Under normal conditions, not required. In case of contact with the contents of an open or damaged product and exceeding the permissible concentrations of vapours, use respiratory protection with particle filter marked white and labelled P2 and vapour filter marked brown and labelled A. You can apply combined filters AP.

Skin and hands protection: In case of contact with the contents of an open or damaged product, wear protective clothing made of natural fabrics (cotton) or synthetic fibres, safety gloves made of nitrile rubber (thickness 0.4 ± 0.05 mm, breakthrough time ≥ 480 min), latex (thickness $0.7 \pm 0,1$ mm, breakthrough time ≥ 480 min).

Eye/face protection: In case of contact with the contents of an open or damaged product, use safety goggles.

Occupational hygiene: General industrial hygiene rules apply. Don't allow exceeding occupational exposure levels. After finishing work remove contaminated clothes. Wash hands and face before work breaks. Wash entire body after finishing work. Do not drink, eat and smoke during work.

8.2.3 *Environmental exposure controls*

Prevent from entering the product's contents to a municipal sewage system and watercourses.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance
Mixture in a sealed container.
- b) Odour
Odourless.
- c) Odour threshold
Not determined.
- d) pH
< 1 (contents of the battery)
- e) Melting/freezing point
No data available.
- f) Initial boiling point and boiling range
No data available.
- g) Flash point
Non-flammable product.
- h) Evaporation rate
Not applicable.
- i) Flammability
According to Annex XI of REACH Regulation, does not have to be determined.
- j) Upper/lower flammability or explosive limits
Study scientifically unjustified.
- k) Vapour pressure
Contents of the battery:
2.8 hPa (180 °C) for the sulphuric acid.
Calculated vapour pressure: 10^{-5} Pa at 20 °C
- l) Vapour density
Not applicable - a mixture in the form of a solid.
- m) Relative density
Contents of the battery:
9.96 g/cm³ (Method A.3 for lead compounds)
Density of the sulphuric acid: ca. 1.84 g/cm³ at 20 °C (96 – 98%)
- n) Solubility(ies)
Contents of the battery:
In water – 70.2 mg/l at 20 °C (Method A.6) for lead compounds; total – sulphuric acid
- o) Partition coefficient: n-octanol/water
Not determined.
- p) Auto-ignition temperature
Study scientifically unjustified.
- q) Decomposition temperature
No data available.
- r) Viscosity
No data available.
- s) Explosive properties
Does not pose an explosion hazard.
- t) Oxidising properties
Not expected to have oxidising properties.

9.2 Other information

No data available.

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No reactivity if stored and used as intended.

10.2 Chemical stability

Not known.

10.3 Possibility of hazardous reactions

Sulphuric acid has a corrosive effect on metals, producing flammable and explosive hydrogen. Rapidly dissolves in water with heat release. Reacts hazardously with: chlorates and perchlorates, phosphorus, chlorosulfonic acid, hydrofluoric acid, perchloric acid, hydrochloric acid, organic substances, especially nitro derivatives. Lead in particulate form (chips, dust) dangerously reacts with ammonium nitrate, hydrogen peroxide, chlorine trifluoride, sodium nitride.

10.4 Conditions to avoid

High temperature, sources of ignition, open fire.

10.5 Incompatible materials

Strong oxidizing agents, strong acids. Lead (one of the components of the mixture) dissolves in hot nitric acid, boiling concentrated hydrochloric and sulphuric acids, acetic acid.

10.6 Hazardous decomposition products

Not known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

The product that is not damaged does not pose a threat to human health. The product is hazardous in the event of rupture, leakage or corrosion, as a result of which its contents may be released.

Acute toxicity:

Harmful if swallowed or if inhaled. (Additivity formula ATE).

Lead and its compounds

TLDo – oram woman 450 mg/kg

TLCo – inhalation human 0.01 mg/m³

TLDo – oral rat 790-1140 mg/kg

TLCo – inhalation rat 10 mg/ m³

Sulphuric acid (VI)

LD₅₀ – oral rat >2000 mg/kg

LCLo – inhalation rat 178 ppm (7h)

Lethal dose is 6-8 g

Skin corrosion/irritation:

Causes severe skin burns.

Serious eye damage/irritation:

Causes serious eye damage.

Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

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Carcinogenicity:

Suspected of causing cancer.

Reproductive toxicity:

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

STOT-single exposure:

Based on available data, the classification criteria are not met.

STOT-repeated exposure:

Causes damage to organs (central nervous system, kidneys, hematopoietic system) through prolonged or repeated exposure (inhalation, oral).

Aspiration hazard:

Based on available data, the classification criteria are not met.

Lead and its compounds

Damages the peripheral and central nervous system and causes anemia, mainly due to the inhibition of red blood cell hemoglobin synthesis. It accumulates in the body: mostly in the bones, as well as in the kidneys and other tissues. Acute poisoning symptoms may occur after several days of exposure to very high concentrations of dust or fumes, or in the course of chronic exposure to lead in a concentration exceeding the acceptable limit values. There are violent pains in the entire abdomen (abdominal colic), usually preceded by a day's constipation; increase in blood pressure may also occur. Orally (accidental or intentional poisoning), powdered lead causes similar symptoms and sometimes yellowing of the sclera of the eyes and damage to the liver. Poisoning may occur in the course of intoxication (usually transient). The consequence of poisoning is the hypochromic anemia (decrease in hemoglobin content and increase in the number of reticulocytes in the blood).

The product contains a lead compound; however, due to poor absorption through the digestive tract, only very large doses lead to poisoning. Lead and lead compounds can cause abdominal pain, diarrhea, loss of appetite, metallic taste in the mouth, nausea, vomiting, fatigue, insomnia, muscle weakness, joint and muscle pain, excitability, headaches and dizziness. Red blood cells can be damaged, causing anemia. There may also be gastritis and damage to the kidneys, liver, female sex glands and the central nervous system.

Health effects of chronic exposure:

Lead and its compounds

Hypochromic anemia, changes in peripheral nerves, mainly limbs. In severe, chronic poisonings, limb paresis occurred, especially in the hands, and symptoms of central nervous system damage (encephalopathy). Even small amounts can accumulate in the organism.

The absorbed lead compounds pass into the blood circulation, where lead builds up into the red blood cells - the average residence time is 30 days. From there 25-40% of its content penetrates into soft tissues, about 15% into the bone, and the remaining amount is excreted. The time of residence in soft tissues is about 30 days, and in the bones of 40-90 years in an adult human. In bones it is accumulated in the form of colloidal and crystalline compounds, it can be released from them under the influence of metabolic disturbances or stress.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Lead

LC₅₀ – fish 236 mg/l

Lethal effect – fish > 1.4 mg/l

Toxic effect – bacteria > 1.8 mg/l

Toxic effect – algae > 3.7 mg/l

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Toxic effect – protozoa > 0.02 mg/l

Sulphuric acid (VI)

Lethal effect- fish (*Brachydanio rerio*) 82 mg/l (24h)

Toxic effect – invertebrates (*Daphnia magna*) 88 mg/l (64h)

Toxic effect - bacteria (*activated sludge*) 58 mg/l (120h)

12.2 Persistence and degradability

Lead compounds are not biodegradable.

12.3 Bioaccumulative potential

Partition coefficient octanol/water: (K_{ow}): Study scientifically unjustified.

Bioconcentration factor (BCF):

Daphnia magna – 1153

Poecilia reticulata (fish) – 436

Lepomis macrochirus (fish) – 20

Lead compounds have a potential to bioaccumulate in living organisms.

BCF (soil) – 0.39 kg/kg

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

The criteria described in Annex XIII (PBT and vPvB properties) do not apply to inorganic substances.

12.6 Other adverse effects

A detailed description is provided in the Chemical Safety Report of lead compounds and sulfuric acid.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not dispose together with municipal waste. Prevent from draining to a municipal sewage system and watercourses.

Pursuant to the regulation on batteries, producers bear the costs of collection, processing and recycling of batteries in devices. For this purpose, disposed batteries should be delivered to designated collection points. It is forbidden to dispose of with household waste. This is indicated by the symbol of the crossed out rubbish bin. The individual types of batteries are collected separately.

European Waste Code:

16 06 01* Lead batteries

06 03 13* Solid salts and solutions containing heavy metals

06 04 05* Wastes containing other heavy metals

SECTION 14: TRANSPORT INFORMATION

ADR/RID, IMDG, IATA

14.1 UN number

2794*

14.2 UN proper shipping name

BATTERIES, WET, FILLED WITH ACID, electric storage

14.3 Transport hazard class(es)

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14.4 Packing group

-

14.5 Environmental hazards

The product is hazardous to the environment according to the UN Model Regulations. It requires additional labelling.

14.6 Special precautions for user

Keep away from high temperatures and ignition sources.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

***NOTE!!**

New batteries if they:

- are fixed in such a way that they cannot slip, fall or be damaged;
- are placed in transport equipment, unless they are piled up, for example on pallets;
- they do not have residues of acidic or alkaline materials on external surfaces;
- are protected against short circuits;

are not subject to the provisions of ADR.

SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ EU L396 of December 30, with later amendments);
COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ EU L353 of December, 31 2008, with later amendments ATP 1-13).

15.2 Chemical safety assessment

The chemical safety assessment of the mixture components was performed.

SECTION 16: OTHER INFORMATION

This product information sheet has been prepared in the Ignacy Mościcki' Industrial Chemistry Research Institute on the basis of the data delivered by the manufacturer.

The information contained in this product information sheet describes the product exclusively from the safety requirements perspective. The user is responsible for setting up the conditions for safe use of the product and bears a sole responsibility for the consequences of its incorrect use.

Note!!!

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Information to be reported in accordance with art. 7 par. 2, include the following data:

- name and contact details of the manufacturer or importer of the product,
- registration number of the substance, if available,
- the identity of the SVHC substance (this information is available on the candidate list and in the accompanying documentation),
- classification of the substance (this information is available on the candidate list and in the accompanying documentation),
- a brief description of the use (-s) of the substance in the article, as specified in section 3.5 of Annex VI, and uses of the article,
- the tonnage band for the substance contained in the product, i.e. 1-10 tons, 10-100 tons, 100-1000 tons or ≥ 1000 tons.

<https://echa.europa.eu/pl/support/dossier-submission-tools/reach-it/notifying-substances-in-articles>

Lead, lead compounds with the exception of those mentioned elsewhere are subject to restrictions resulting from Annex XVII to the REACH regulation.

Lead tetraoxide, Lead monoxide, Pentalead tetraoxide sulphate, Tetralead trioxide sulphate are listed on the Candidate List of Substances of Very High Concern (SVHC) - date of entry: 19/12/2012.

Data for the registered substances: <http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

Text of H statements, hazard classes and category codes used in the section 3 of this product information sheet:

H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.
H351	Suspected of causing cancer.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H372	Causes damage to organs (central nervous system, kidneys, hematopoietic system) through prolonged or repeated exposure (inhalation, oral).
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Repr. 1A	Reproductive toxicity, Hazard Category 1A
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Carc. 2	Carcinogenicity, Hazard Category 2
Acute Tox. 4	Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 4
STOT RE 1	Specific target organ toxicity — Repeated exposure, Hazard Category 1
Skin Corr. 1A	Skin corrosion/irritation, Hazard Category 1, Sub-Category 1A
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1

Abbreviations:

OEL	Occupational Exposure Level (8 h/day).
WEL	Workplace Exposure Limits
STEL	Short Term Exposure Limit
vPvB	very Persistent very Bioaccumulative.
PBT	Persistent, Bioaccumulative, Toxic.
LD ₅₀	Lethal dose, median dose, where 50 % of test subject dies.
LC ₅₀	Lethal concentration, median concentration where 50 % of test subjects dies.

PRODUCT INFORMATION SHEET

Prepared in the format conforming to the Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ of EU no L132 of 29 May 2015)

EC ₅₀	The effective concentration of substance that causes 50% of the maximum response.
DNEL	Derived No-Effect Level.
PNEC	Predicted No Effect Concentration.
NOEC	No observed effect concentration.
BCF	Biological Concentration Factor.

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