SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : VALVE REGULATED SEALED NON-SPILLABLE LEAD ACID BATTERY

VRB, VRLA, SLAB, Recombinant acid lead: DC, FT, FFD series

The battery is considered to be an ARTICLE for the purposes of REACH

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

Relevant identified uses:

Electric storage battery.

1.3. Details of the supplier of the safety data sheet

Registered company name : Fullriver Battery Manufacture Co. Ltd..

Address : 3823 Mission Oaks Blvd - Suite A.Camarillo.CA 93012.U.S.A..

Telephone : 805-484-7900. Fax : -.

support@fullriverbattery.com

https://fullriverbattery.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA http://www.centres-antipoison.net.

Other emergency numbers

National Poisons Information Service of England: http://npis.org - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - European Emergency Number Association (EENA) : 112

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Acute dermal toxicity, Category 4 (Acute Tox. 4, H312).

Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332).

Skin corrosion, Category 1A (Skin Corr. 1A, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Reproductive toxicity, Category 1A (Repr. 1A, H360FD).

Reproductive toxicity, Effects on or via lactation (Lact., H362).

Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).

Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).

Hazardous to the aquatic environment - Chronic hazard, Category 1 (Aquatic Chronic 1, H410).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS07 GHS05 GHS09 GHS08

Signal Word :

DANGER

Product identifiers :

082-013-00-1	LEAD POWDER, (PARTICLE DIAMETER < 1 MM)
016-020-00-8	SULPHURIC ACID

Additional labeling :

For professional users only.

Hazard statements :

H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled.

H314	Causes severe skin burns and eye damage.
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 (kidneys, central nervous system, blood).
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements - Prevention :	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist/vapours.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor/if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.
P391	Collect spillage.
Precautionary statements - Storage :	
P405	Store locked up.
Precautionary statements - Disposal :	
P501	Dispose of contents/container at a disposal facility in accordance with local regulations.

2.3. Other hazards

The mixture contains substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

THE BATTERY IS AN ARTICLE CONTAINING AN INTEGRATED MIXTURE (electrolyte - REACH definition).

THE ELECTROLYTE IS CONSUMED DURING THE ARTICLE'S USE PHASE AND IS NOT REJECTED (unless the article is damaged).

THE ABOVE LABEL IS THEREFORE FOR INFORMATION PURPOSES in case the ARTICLE IS DAMAGED and should not be fixed to the article.

The rechargeable lithium ion batteries described in this SDS are sealed products that are not hazardous when used in accordance with the manufacturer's instructions.

Do not short circuit, pierce, incinerate, crush, submerge, forcefully discharge or expose to temperatures in excess of the operating range stated on the products. Risk of fire and explosion.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 082-013-00-1 CAS: 7439-92-1 EC: 231-100-4 LEAD POWDER, (PARTICLE DIAMETER < 1 MM)	GHS08, GHS09 Dgr Repr. 1A, H360FD Lact., H362 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 10	[1] [2] [6] [XVII]	60 <= x % <= 70

INDEX: 016-020-00-8 CAS: 7664-93-9 EC: 231-639-5 REACH: 01-2119458838-20 SULPHURIC ACID	GHS05 Dgr Skin Corr. 1A, H314	B [1]	10 <= x % <= 15
CAS: 7440-31-5 EC: 231-141-8 REACH: 01-2119486474-28 TIN		[1]	x % < 1

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 082-013-00-1 CAS: 7439-92-1 EC: 231-100-4 LEAD POWDER, (PARTICLE DIAMETER < 1 MM)	Repr. 1A: H360F C>= 0.03% Repr. 1A: H360D C>= 0.03%	
INDEX: 016-020-00-8 CAS: 7664-93-9 EC: 231-639-5 REACH: 01-2119458838-20 SULPHURIC ACID	Skin Corr. 1A: H314 C>= 15% Skin Irrit. 2: H315 5% <= C < 15% Eye Dam. 1: H318 C>= 15% Eye Irrit. 2: H319 5% <= C < 15%	

Information on ingredients :

(Full text of H-phrases: see section 16)

[XVII] Restricted substance under Regulation (EC) No. 1907/2006 (REACH), Annex XVII.

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

[6] Substances of very high concern (SVHC).

Other data :

Each battery consists of a sealed metal container containing chemical substances and components, some of which may be hazardous in the event of a leak.

There is no risk from being exposed to these batteries unless the seal containing the electrochemical elements is broken by exposure to excess temperatures or the accidental application of abusive electrical or mechanical constraints.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

If this event is the result of an accident, follow the advice below:

If a battery is ruptured or opened, evacuate people from the contaminated zone and ensure maximum ventilation to eliminate any corrosive gases, smoke or unpleasant odours.

In the event of exposure by inhalation :

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation.Use the appropriate equipment.

If inhaled, move the patient into the fresh air and keep warm and at rest.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- powder
- halon
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- hydrogen sulphide (H2S)
- sulphur oxides (SOx)
- sulfuric acid mist

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

Avoid inhaling dust.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

Hermetically seal leaking batteries and any contaminated absorbent material in a plastic bag and eliminate it as Special Waste in accordance with local regulations.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Do not crush or pierce the batteries or short circuit their positive/negative terminals with conducting materials (e.g.: metals) as this can result in excessive heating.

Do not apply direct heat or solder. Do not burn batteries.

Do not mix different brands or types of battery. Do not mix new batteries with old batteries.

Store batteries in non-conductive trays (e.g.: plastic).

Do not disassemble, damage or mechanically degrade the batteries.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not breathe in dust.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid exposure - obtain special instructions before use.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink, including those for animals.

Leave a suitable gap between the batteries and walls.

Temperatures in excess of 70°C may cause batteries to leak and rupture.

Store batteries in their original packaging until they are to be used; do not mix them as a short circuit can cause a fire, a risk of leaks or rupture.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

Comply with the manufacturer's recommendations and the operating temperature range.

Applying pressure that can deform the battery may result in a disassembly followed by ocular, dermal or laryngeal irritation.

Do not immerse the batteries in water.

Never use a battery with a nominal capacity of less than 80% and never “start” a device with a “discharged” (flat) battery. Always remove a "dead" battery from your device and perform a capacity test to verify seaworthiness.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
7664-93-9	0.05	-	-	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7439-92-1	0.05 mg/m3	-	-	-	-
7664-93-9	0.2 (T) mg/m3			A2 (M)	
7440-31-5	2 mg/m3				

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
7664-93-9		0.1 E mg/m3		1(I)

- Belgium (Royal decree of 11/05/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7439-92-1	0.05 mg/m3	-	-	-	-
7664-93-9	0.2 mg/m3			C	
7440-31-5	2 mg/m3			D	

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
7439-92-1	-	0.1	-	-	-	1
7664-93-9	-	0.05t	-	3	-	-

- Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
7439-92-1	0.1 ppm	0.8 ppm		
7664-93-9	0.1 ppm	0.2 ppm		
7440-31-5	0.003 ppm 0.015 mg/m3	0.024 ppm 0.12 mg/m3		

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7664-93-9	0.05 mg/m3			The mist is defined as the thoracic fraction	

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

Wear acid-resistant gloves.

Protect against electrolyte leakage.

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1/A1 to prevent skin contact.

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

Wear acid-resistant clothing and boots.

Protect against electrolyte leakage.

- Respiratory protection

Avoid inhaling dust.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state :	Solid.
-	The battery can be contained in an aluminum or steel outer casing. The box has metal terminals. It contains lead and an electrolyte.

Colour

Color :	Not stated.

Odour

Odour threshold :	Not stated.
Odor:	Odourless.

Freezing point

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.

Flammability

Flammability (solid, gas) :	Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

Flash point

Flash point interval :	Not relevant.

Auto-ignition temperature

Self-ignition temperature :	Not relevant.

Decomposition temperature

Decomposition point/decomposition range :	Not relevant.

pH

pH (aqueous solution) :	Not stated.
pH :	Not stated. Strongly acidic.
pH range:	< 2

Kinematic viscosity

Viscosity :	Not stated.

Solubility

Water solubility :	Insoluble.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.

Vapour pressure

Vapour pressure (50°C) :	Not relevant.

Density and/or relative density

Density :	1.250 - 1.320

Relative vapour density

Vapour density :	Not stated.
Electrolyte:	3.4 (air=1)
Hydrogen:	0.069 (air=1)

Particle characteristics

The mixture does not contain nanoforms.

9.2. Other information

% VOC :	0

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- heat
- flames and hot surfaces
- sparks

10.5. Incompatible materials

Keep away from :

- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- hydrogen sulphide (H2S)
- sulphur oxides (SOx)
- sulfuric acid mist

SECTION 11 : TOXICOLOGICAL INFORMATION

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

Harmful if swallowed.

Harmful in contact with skin.

Harmful by inhalation.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure for up to three minutes.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

Known human reproductive toxicant.

May damage fertility and the unborn child.

Presents a risk on or via lactation.

May cause severe damage to organs in the event of repeated or prolonged exposure.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

Acute toxicity :

Oral route :	Harmful if swallowed. 300 < LD50 <= 2000 mg/kg
Dermal route :	Harmful in contact with skin. 1000 < LD50 <= 2000 mg/kg
Inhalation route (Dusts/mist) :	Harmful by inhalation. Duration of exposure : 4 h 1 < LC50 <= 5 mg/l

Specific target organ systemic toxicity - repeated exposure :

May cause severe damage to organs in the event of repeated or prolonged exposure.

Oral route :	10 < C <= 50 mg/kg body weight/day

11.2. Information on other hazards

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 7439-92-1 : IARC Group 2B : The agent is possibly carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2023 [64]).
UN2800: The NEW accumulator is NOT SUBJECT to the requirements of ADR, IMDG and IATA provided that it complies with:
- ADR: special provisions 238-295-598
- IMDG : provision 238
- IATA: packing instruction 872 and special provisions A48-A67-A164-A183

14.1. UN number or ID number

2800

14.2. UN proper shipping name

UN2800=BATTERIES, WET, NON- SPILLABLE, electric storage

14.3. Transport hazard class(es)

- Classification :

8

14.4. Packing group

-

14.5. Environmental hazards

- Environmentally hazardous material :

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C11	-	8	80	1 L	238 295 598	E0	3	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	8	-	-	1 L	F-A. S-B	238	E0	Category A	-

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	-	872	unlimited	872	unlimited	A48 A67 A164 A183	E0
	8	-	-	Forbidden	Forbidden	-	-	A48 A67 A164 A183	E0

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(lead powder, (particle diameter < 1 mm))

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture contains at least one restricted substance under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach. Please refer to Section 3 to identify the substance involved.

For professional users only.

Explosives precursors :

The mixture contains at least one substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors:

- Sulphuric acid (CAS 7664-93-9)

Particular provisions :

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H314	Causes severe skin burns and eye damage.
H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

CMR: Carcinogenic, mutagenic or reprotoxic.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

GHS08 : Health hazard

GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.