

MATERIAL SAFETY DATA SHEET

Commission Regulation (UE) No 453/2010

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1 z 13Date:
Version:30.06.2011
ver. 1**Section 1. Identification of the substance / mixture****1.1****Product identification**

Product name

Acid Batteries

Proper Shipping name

Batteries, wet, filled with acid

CAS

WE:

Registration No:

Concerning the acid:**7664-93-9****231-639-5****01-2119458838-20-xxx****1.2****Relevant identified uses of the substance or mixture and uses advised against****Uses advised****MSDS refers to acid batteries.
The main ingredient which can be hazardous
is the inorganic lead and electrolyte (sulfuric
acid).****Uses advised against****use for what it was not intended;****1.3****Details of the supplier of the safety data sheet**

Producer

ZAP SZNAJDER BATERIEN S.A.
ul. Warszawska 47,
05-820 Piastów

Contact person

Chief technologist/Production Manager
Mr. Jan JędrasikThe company that made the safety
data sheet**DGM Poland Sp. z o.o.**
ul. Radarowa 56,
02-137 Warszawa
www.dgmpoland.pl**1.4****The emergency number**

Phone:


+48 22 753 99 77

(Monday – Friday, 8 a.m. – 4 p.m.)

SECTION 2: Hazards identification**2.1****Classification of the substance or mixture**

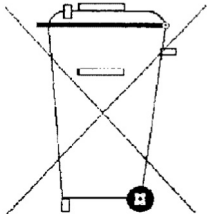
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	Classification according to the Directive (WE) Nr 1272/2008 [CLP]	Warning: Classification refers to the acid batteries. Skin Corr. 1A H314 – C Caused of serious skin burn and eyes damages.
	Classification according to the Directive 67/548/EWG	C – CAUSTIC R 35 – Caused serious burn
2.2	Marking and Labeling	
	Classification according to the Directive (WE) Nr 1272/2008 [CLP]:	<p>Warning: Below marking and labeling refers to the substance included in the batteries, not the batteries themselves. The marking and labeling of batteries in accordance with domestic law.</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>GHS 05 Risk phrase: Danger H314 – Cause serious skin burn and eyes damage.</p> </div> </div> <p>Prevention: P260 Do not inhale the vapour of the substance P264 Wash hands after usage. P280 Use protective gloves, protective clothes, eyes and face protection. Reaction – first aid measures P301+P330+P331 INGESTION: If swallowed accidentally, rinse mouth with water. DO NOT induce vomiting. P303 + P361 + P353 SKIN/HAIR CONTACT: Remove/ take off the contaminated clothes immediately. Rinse the contaminated place with the stream of water/shower. P363 Wash contaminated clothes before using. P304+P340 INHALATION: Lead or carry the person immediately to fresh air and provide the condition to rest in the position which enables easy breathing. P310 Contact the national health authorities or a doctor. P305 + P351 + P338 EYE CONTACT: Rinse eyes carefully with water for a few minutes. Remove the lens if applicable, and if it is possible. Rinse eyes with water again. Storage P405.Keep packing closed. Removal P501 Remove the content / container in accordance with local and regional regulations.</p>
	Classification according to the Directive 67/548/EWG	

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	„R” symbol	C – CAUSTIC R 35 – Cause serious burn.
	„S” symbol	(1/2) Keep locked up and out of the reach of children. Keep packing closed. 26 Rinse the contaminated eyes with a big stream of water immediately and consult a doctor. 30 Do not add water to this product. 45 In case of damage or if a person feels sick, contact a doctor immediately. If possible show the label of the product.
	Marking of the product	Required markings in accordance with the regulations for batteries . <div><p>Symbol should fill at least 3 % of the biggest side of the batteries. It should have maximal dimensions of 5x5 cm .</p></div> <p>Depending on ingredients of batteries, chemical symbol of lead should be marked: Pb Symbol should be placed beyond the symbol listed above in a way that it should be one/quarter of the size of the mentioned symbol.</p>
2.3	Other risks	
	PBT or vPvB Comment:	They are not classified as dangerous goods The casing includes: Polypropylene (9003-07-0), Polystyrene (9003-53-6), Copolymers styrene (9003-54-7), vinyl polychloride (9002-86-2)
SECTION 3: Composition/ information about ingredients		
	Substance:	
	CAS 7664-93-9 WE 231-639-5 sulphuric acid (IV) Content <99%	
	Solutions:	
	Not applicable	
SECTION 4: First aid measures		

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4.1

Description of first aid measures

General information

The safety data sheet was based on the information concerning the substance included in the batteries. Particular measures should be introduced in case of water contact. An exposed person should be carried to fresh air. Provide heat and calmness. In case of loss of consciousness place the person on his side. In case of breathing problems, if possible, provide the oxygen or start respiration. The exposed person should be carried away from the exposing place to the fresh air. In case of stopping the heart action (lack of pulse), provide the reanimation (resuscytację krążeniowo-oddechową). Consult a doctor immediately in case of alarming symptoms. Show the label/ MSDS.

Respiratory system:

Lead the person to fresh air. In case of alarming symptoms, call a doctor. Physical effort may cause emphysema.

Skin contact:

Immediately, rinse the skin carefully with water. DO NOT USE SOAP. Remove contaminated clothes. Put sterile dressing. Provide medical assistance.

Eye contact:

Rinse eyes carefully with water continuously for at least 15 minutes. Eyes should be wide open during rinsing. Remove lens. Lead the person to hospital.

Ingestion

Do not induce vomiting. Call a doctor.

4.2

The most serious, late symptoms and effects of exposure:

Immediate effects

No access to further significant data

Late effects

No access to further significant data

4.3

Comments on first aid measures and particular treatment of the exposed person

Treatment of the person

Lead a person to fresh air. In case of symptoms call a doctor.

First aid

Provide a treatment of symptoms

SECTION 5: Fire fighting measures

5.1

Extinguishing media

Appropriate extinguishing media

CO₂, extinguisher powder or foam. In case of more serious fires use foam.

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	Inappropriate extinguishing media	Stream of water
5.2	Particular risks connected with the substance/ solution	
	Products of burn	CO and CO2. compounds of sulphur. Irritant products of burning.
5.3	Information for fire brigade	
	Information for firemen	Small leakage: usually standard antistatic work clothes are appropriate. Serious leakage: take on protective clothes, including full-face self-contained breathing apparatus, unless the atmosphere is considered to be uncontaminated. The batteries may explode during the fire.
SECTION 6: Accidental release measures		
6.1	Individual protective measures, protective equipment and procedures in emergency situations	
	General	Provide sufficient ventilation.
	For personnel who is not involved in first aid	Avoid exposure
	For people involved in first aid	Use protective measures and equipment
6.2	Environmental protection precautions	
	Prevent the contamination of drains, surface or subterranean waters, and the ground. Cover with absorbent. Clean the waste mechanically.	
6.3	Measures and materials which prevent from further spreading contamination and which clean contamination.	
6.3.1	Measures and materials which protect from spreading contamination	If it is safe, prevent from further leakage. Separate the exposed area. In case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation.
6.3.2	Measures concerning the cleaning of the spill	Clean the waste with absorbent materials (sand, diatomaceous earth, materials binding acids, sawdust).
6.3.3	Inappropriate measures	Do not rinse to sewage system.

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6.4	References to other sections	
	Additional information and individual protective measures and control parameters are presented in the section 8. Section 13 includes information connected with removal of waste. .	
SECTION 7: Handling and storage of the substance/material		
7.1	Usage precautions	
	<p>Place batteries in a way which protects from short circuit and damage. Prevent from using incompatible substances and solutions; reduce releasing substances and solutions to environment for example, by preventing from leakage or seep in sewerage system.</p> <p>In order to avoid releasing of the substance, consider technical improvement and facilitation of the process (including automation). Minimize the possibility of exposure by such methods like separated areas, special installations or areas and suction fans (general and local). Empty systems and clean canals before opening the safety casing of installations. If possible, clean or rinse the equipment before maintenance.</p> <p>Consider health consultation, depending on the risk. Provide safety and protection procedures connected with risk management. Carry out services, tests and maintenance of all control measures regularly. Smoking, eating and drinking is forbidden in working area. Rinsed water must be rid of in accordance with local and country regulations.</p>	
7.2	Measures of industrial safety	
	Smoking, eating and drinking is forbidden in the place of services in working area. Wash hands after work. Remove contaminated clothes and protective equipment before entering to places designed for eating.	
7.3	Storage conditions	
	Protect from freezing cold. Store product in a cool and well ventilated area. It must be kept shaded from direct sunlight. The equipment of the warehouse should be acid - proof.	
7.4	Additional safety procedures	
	No additional safety procedures. Adopt procedures from the subsection 7.1, 7.2.	
SECTION 8: Exposure controls/personal protection		
8.1	Control parameters	
	Exposure limits in mg/m3	Sulphuric acid NDS 1 NDSh 3

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Advised current monitoring procedures

Act in accordance with regulations connected with monitoring of air clearness and for example in accordance with the Polish regulations: PN-Z-04008-7:2002 „Procedures of preparing samples of air in the working place and interpretation of the results”. Do not allow to arise high concentration of substance ingredient in the air, which could exceed a safety standard.

DNEL value:

No access to further significant data

8.2

Exposure control:

Applied technical control measures

Provide local ventilation.

Advised personal protection

Eyes/face

Safety goggles

Hands/skin

Acidproof gloves

Type and the thickness of cloth

Nitral rubber >0,7 mm

Strength

Level >4

Inhalation

Not required in case of good ventilation. Advised filters E-P2

Thermal safety

Not applicable

8.2.3

Control of exposure to environment

Do not allow to seep in the ground.

SECTION 9: Physical and chemical properties

9.1

Information about the basic physical and chemical properties

Physical state, colour,

Liquid, brown, viscous

Odour

suffocating

Odour threshold

Unspecified

pH

<1

Melting point

from -13.89 to -10.0 °C (acid 96%)

Boiling point/range

290 °C

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	Melting range	Not applicable
	Flash point	Not applicable
	Vapour velocity	Not applicable
	Combustibility	Not applicable
	Explosive limits	Not explosive % Vol
	Vapour pressure	130Pa for 148,5 °C 214 Pa for 20 °C
	Vapour density	Not applicable
	Relative density	1,814-1.8305 g/cm ₃ (DIN 51757)
	Solubility	Integral solubility
	Division factor: n-octanol/water	Unspecified
	Autoignition temperature	Not applicable
	Decomposition temperature	Not applicable
	Viscosity	For acid 95% - 22,5 mPaS
	Explosive properties	Not explosive
	Oxidizing properties	Creates favorable conditions for oxidizing of metals
9.2	Other information	
	Solid content in the substance: 0% Organic solvent content in the substance: 0%	
SECTION10: Stability and reactivity		
	Reactivity	Sulphuric acid (VI) is very strong acid with high reactivity. Solubility results in large amount of heat.
	Chemical stability	No decomposition in case of obeying storage procedures and advised usage.
	Hazardous reactions with	Reacts with water, bases (possible strong reaction), alcohols, amines

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	Conditions to avoid	Avoid products that react with water. It has a caustic effect on some metals; during the reaction hydrogen may be liberated. Passivating iron and aluminium. It has a caustic effect on semi-precious metals; during the reaction SO ₂ may be liberated. During charging the batteries hydrogen may be liberated.
	Incompatible materials	Water, alcohols, bases, amines.
	Hazard products of decomposition	Products are unknown

SECTION 11: Toxicological information

11.1	Information about toxicological result	
	Acute toxicity	LD ₅₀ (ingestion): 2140 mg/kg m ³ LC ₅₀ (inhalation): 375 mg/m ³ air
	Dermal corrosion/irritation	It has caustic effect on skin
	Eye damage/eye irritation	It has caustic effect on eyes
	Inhalation toxicity	Possible
	Mutational effects on reproductive cells	No access to further significant data
	Carcinogenicity	Not applicable
	Harmful effect on reproductiveness	Inhalation: NOAEC: 19,3 mg / m ³
	Toxical effect on internal organs; disposable exposure	Causes allergy, it has caustic effect.
	Toxical effect on internal organs; multiple exposure	Suspected of carcinogenic properties.
	Hazard aspiration	Possible allergic reactions
	Comment	If the batteries are heated, it is possible that odors and fumes containing lead compounds will be liberated. Inhalation of fumes may lead to irritation of respiratory track and lungs. The symptoms may be as follows: headache, tiredness, stomachache, losing of appetite, muscles pain, feeling of weakness, sleeping disorders and being prone to allergy .

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11.2

Information connected with the possible way of exposure

The product should be labeled and marked in accordance with general regulations of classification.

11.3

Symptoms connected with the physical, chemical and toxicological properties of substance

Not applicable

11.4

Delayed, direct and chronic effects of short and long – lasting exposure

Possible allergic reaction

11.5

Results of mutual influence

Not applicable

11.6

Additional information

Not applicable

SEKCJA 12: Ecological information

Toxicity

EC10/LC10 or NOEC for freshwater Fish
0,025 mg / L
EC50> 100 mg / L (Daphnia magna).
EC50/LC50 for freshwater invertebrate:
100 mg / L
EC10/LC10 or NOEC for freshwater invertebrate:
0,15 mg / L
EC10/LC10 or NOEC freshwater algae: 100 mg / L
EC10/LC10 or NOEC water micro - organisms :
26000 mg / L

Stability and tendency to decomposition

Not biodegradable

Capability of bioaccumulation

No access to further significant data

Mobility in soil

No access to further significant data

Results of properties assessment
PBT and vPvB

No access to further significant data

Other harmful effects

It has harmful effect on water

SECTION 13: Disposal considerations

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The methods of waste neutralization

Must undergo special services in accordance with local regulations

Suggested code

According to the place of manufacture

Comment

For acid: 15 01 01
For batteries:16 06 01*

SEKCJA 14: Transport information

UN number

UN 2794

Proper Shipping Name

BATTERIES, WET, FILLED WITH ACID, electric storage

Hazard class

8

Packing group

No access to further significant data

Environmentally hazardous

Not applicable

Special safety measures for users

Draw attention to special provisions:
295 (ADR, IMO) There is no need to mark and label each product if the marking and labeling is visible on palette

598 Products which are exempted from ADR regulations:

(a) New storage batteries when:

- they are secured in such a way that they cannot slip, fall or be damaged;
- they are provided with carrying devices, unless they are suitably stacked, e.g. on pallets;
- there are no dangerous traces of alkalis or acids on the outside;
- they are protected against short circuits;

(b) Used storage batteries when:

- their cases are undamaged;
- they are secured in such a way that they cannot leak, slip, fall or be damaged, e.g. by stacking on pallets;
- there are no dangerous traces of alkalis or acids on the outside of articles;
- they are protected against short circuits.

"Used storage batteries" means storage batteries carried for recycling at the end of their normal service life.

Transport of loose products in accordance with the second attachment of MARPOL Convention 73/78 and IBC Code

Not applicable

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SECTION 15: Regulatory information		
15.1	Special regulations concerning safety, health and environmental protection.	
	<p>General regulations:</p> <p>15.1.1 European Parliament and Board order (WE) No 1907/2006 on 18 December 2006, to registration, assessment, certification and applied limits in the scope of chemicals (REACH) and establishment of European Chemical Association (EU Law gazette version L no 396 on 30 December 2006 and disclaimer EU version L no136 on 29 2007 with later amendments.)</p> <p>15.1.2 European Commission order No 453/2010 on 20 May 2010 changing order (WE) no. 1907/2006 European Parliament and Board about registration, assessment, certification and applied limits in the scope of chemicals (REACH)</p> <p>15.1.6 European Parliament and Board order 2008/98/WE on waste and rescinding some orders (EU Law gazette version L no 312 on 22 November 2008)</p> <p>15.1.7 European Commission order 91/689/WE on hazard waste amended by European Commission order 94/31/EWG and spread by Commission's decision 94/904 on establish of hazard waste list</p> <p>15.1.5 European Parliament and Board order (WE) No. 1272/2008 on16 December 2008 to classify, marking and packing of substances and solutions, changing and rescinding orders 67/548/EWG and 1999/45/WE and changing order (WE) no. 1907/2006 (EU Law gazette version L no 353 on 31 December 2008 with further amendments)</p> <p>15.1.14 European Parliament and Board order (WE) No. 2037/2000 on 29 June 2000 to substances reducing ozone layer (EU Law gazette version L No. 244 on 29 September 2000)</p> <p>Polish regulations:</p> <p>15.1.3 Ustawa z dnia 11 września 2001r. o substancjach i preparatach chemicznych (Dz. U. 09.152.1222 z p.żn. zm.)</p> <p>15.1.4 Rozporządzenie Ministra Zdrowia z dnia 2 września 2003r. w sprawie kryteriów i sposobu klasyfikacji substancji i preparatów chemicznych (Dz. U. 03.171.1666 z p.żn. zm.)</p> <p>15.1.8 Ustawa z dnia 27 kwietnia 2001r. o odpadach (Dz. U. 2010.185.1243 z p.żn. zm.)</p> <p>15.1.9 Rozporządzenie Ministra Gospodarki i Pracy z dnia 4 sierpnia 2004r. w sprawie szczegółowego sposobu postępowania z olejami odpadowymi (Dz. U. 04.192.1968)</p> <p>15.1.10 Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 29 listopada 2002r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynnik.w szkodliwych dla zdrowia w środowisku pracy (Dz. U. 02.217.1833 z p.żn. zm.)</p> <p>15.1.11 Rozporządzenie Ministra Zdrowia z dnia 20 kwietnia 2005r. w sprawie badań i pomiarów czynników szkodliwych dla zdrowia w środowisku pracy (Dz. U. 05.73.645 z p.żn. zm.)</p> <p>15.1.12 Rozporządzenie Ministra Zdrowia z dnia 30 grudnia 2004r. w sprawie bezpieczeństwa i higieny pracy związanej z występowaniem w miejscu pracy czynników chemicznych (Dz. U. 05.11.86 z p.żn. zm.)</p> <p>15.1.13 Rozporządzenie Ministra Środowiska z dnia 24 lipca 2006r. w sprawie warunków, jakie należy spełnić przy wprowadzaniu ścieków do wód lub do ziemi oraz w sprawie substancji szczególnie szkodliwych dla środowiska wodnego (Dz. U. 06.137.984 z p.żn. zm.)</p> <p>15.1.15 Rozporządzenie Ministra Budownictwa z dnia 14 lipca 2006r. w sprawie sposobu realizacji obowiązków dostawców ścieków przemysłowych oraz warunków wprowadzania ścieków do urządzeń kanalizacyjnych (Dz. U. 06.136.964)</p>	
15.2	Assessment of chemical safety	
	The substance was examined on the chemical safety. The product has no risk to human, it is not CMR, PBT, vPvB – an exposure schedule is not required.	
SECTION16: Other information		
16.1	Up – dates of information	
	The present edition of MSDS rescinds all earlier editions.	

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16.2

Explanation of abbreviations

Hazard terms
All terms were explained during their usage.

16.3

References to specialist literature and sources of data

The present MSDS was prepared on basis of information included in Product Sheet given by the manufacturer. .
Binding regulations.
Chemicals register.

16.4

Recommended training

The training of workers should embrace handling procedures and protective measures concerning handling of chemicals.
Obey general regulations of safety and industrial safety.

Warning:

The information provided in this Safety Data Sheet is correct to the best of our knowledge (information and belief at the date of its publication). Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Protective and safety measures as well as advices for environmental protection included in MSDS do not have to be appropriate for every individual person and situation. It is a user who is responsible for assessment of mentioned measures and handling of the product in a safe way as well as in accordance of binding law and regulations.

End of Safety Data Sheet