



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : BATTERIE NIMH

Product code : SPIT - NIMH.

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

Rechargeable lithium ion batteries.

Nickel-metal hybride battery.

1.3. Details of the supplier of the safety data sheet

Registered company name : SPIT PASLODE.

Address : 150, route de Lyon.26500.BOURG LES VALENCE.France.

Telephone : 0 810 102 102. Fax : 0 810 432 432.

Email : msds-reach@spit.com

<http://www.spit.fr>

1.4. Emergency telephone number : 112.

Association/Organisation : European emergency number.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

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

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

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Carcinogenicity, Category 2 (Carc. 2, H351).

Specific target organ toxicity (repeated exposure), Category 1 (STOT RE 1, H372).

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

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

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

Hazard pictograms :



GHS05



GHS07



GHS08

Signal Word :

DANGER

Product identifiers :

028-002-00-7

NICKEL

019-002-00-8

POTASSIUM HYDROXIDE

Additional labeling :

Hazard statements :

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H351

Suspected of causing cancer .

H372

Causes damage to organs through prolonged or repeated exposure (if inhaled).

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 dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
Precautionary statements - Disposal :	
P501	Dispose of contents/container at a disposal facility in accordance with local regulations.
Other information :	

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European CHemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

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

N/A

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	(EC) 1272/2008	Note	%
INDEX: 028-002-00-7 CAS: 7440-02-0 EC: 231-111-4 REACH: 01-2119438727-29	GHS08, GHS07 Dgr Carc. 2, H351 STOT RE 1, H372 Skin Sens. 1, H317	S [1] [2]	16 - 29.00 %
NICKEL			
POUDRE D'ALLIAGE			15 - 28.00 %
BOITE			12 - 17.00 %
INDEX: 019-002-00-8 CAS: 1310-58-3 EC: 215-181-3 REACH: 01-2119487136-33	GHS05, GHS07 Dgr Acute Tox. 4, H302 Skin Corr. 1A, H314	[1]	12 - 13.00 %
POTASSIUM HYDROXIDE			
CAS: 7732-18-5 EC: 231-791-2			5 - 6.00 %
WATER			
SEPARATEUR			3 - 4.80 %
NYLON			1.8 - 2.20 %

Information on ingredients :

- [1] Substance for which maximum workplace exposure limits are available.
[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

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 :

In the event of massive inhalation of dust, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

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 contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Remove any soiled or splashed clothing immediately.

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

In the event of an allergic reaction, seek medical attention.

If the contaminated area 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 and consult a doctor.

Seek medical attention immediately, showing 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

No data available.

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)

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.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

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.

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.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7440-02-0	1.5 mg/m ³	-	-	-	I
1310-58-3			2 mg/m ³		

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
7440-02-0		0,006 A mg/m ³		8(II)

- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7440-02-0	1 mg/m ³				
1310-58-3		2 mg/m ³		M	

- France (INRS - ED984 :2012) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
7440-02-0	-	1	-	-	C3	-
1310-58-3	-	-	-	2	-	-

- Switzerland (SUVA 2015) :

CAS	VME	VLE	Valeur plafond	Notations
7440-02-0	0,05 i mg/m3			S B C1
1310-58-3	2 i mg/m3			

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7440-02-0	0.1 mg/m3	-	-	-	-
1310-58-3		2 mg/m3			

8.2. Exposure controls

Appropriate engineering controls

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

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

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.

Recommended properties :

- Impervious gloves in accordance with standard EN374

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 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.

Use personal protective equipment in the event of an electrolyte leak.

- Respiratory protection

Avoid breathing 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.

Category :

- FFP3

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A3 (Brown)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Solid.
-	Prismatic or cylindrical shaped batteries.
Odour:	Odour-free (except if the product is damaged and there is an electrolyte leak)

Important health, safety and environmental information

pH :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	> 1
Water solubility :	Insoluble.

9.2. Other information

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

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

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.

May cause an allergic reaction by skin contact.

Suspected human carcinogen.

Causes 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

No toxicological data available for the mixture.

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

CAS 7440-02-0 : IARC Group 2B : The agent is possibly carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION**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. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : 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.

Do not incinerate or submit elements to temperatures in excess of 70°C. An excess temperature may damage the seal, cause a leak and/or cause elements to explode.

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, preferably 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

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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. 2016/1179. (ATP 9)

- Container information:

No data available.

Usage restrictions apply to the product : See annex XVII of EC regulation No. 1907/2006.

For professional users only.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : 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 :

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer .
H372	Causes damage to organs through prolonged or repeated exposure .

Abbreviations :

CMR: Carcinogenic, mutagenic or reprotoxic.

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

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.