

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

• **1.1 Product identifier**

• **Trade name:**

Ni-MH cylindrical Battery; Ni-MH Button Battery

• **Other means of identification:**

Article No.: Ni-MH cylindrical Battery:

AA50, AA80, AA100, AA150, AA200, AA250, AA300, AA330, AA350, AA400, AA450, AA500, AA550, AA600, AA650, AA700, AA750, AA800, AA850, AA900, AA950, AA1000, AA1100, AA1200, AA1300, AA1400, AA1500, AA1600, AA1700, AA1800, AA1900, AA2000, AA2100, AA2200, AA2300, AA2400, AA2500, AA2600, AA2700, AA2800, AA2900, AA3000, AA3100, AA3200, AA3300, AA3400, AA3500, AA3600 etc

AAA80, AAA100, AAA150, AAA200, AAA250, AAA300, AAA330, AAA350, AAA400, AAA450, AAA500, AAA550, AAA600, AAA650, AAA700, AAA750, AAA800, AAA900, AAA1000, AAA1100, AAA1200, AAA1300, AAA1400, AAA1500.etc

1/4AAA50, 1/4AAA60, 1/4AAA80 ect

1/3AAA50, 1/3AAA60, 1/3AAA70, 1/3AAA80, 1/3AAA85, 1/3AAA90, 1/3AAA100, 1/3AAA110, 1/3AAA120, 1/3AAA150, 1/3AAA180 etc

2/3AAA80, 2/3AAA100, 2/3AAA130, 2/3AAA120, 2/3AAA150, 2/3AAA180, 2/3AAA200, 2/3AAA250, 2/3AAA300, 2/3AAA350, 2/3AAA400.etc

2/3AA80, 2/3AA100, 2/3AA120, 2/3AA150, 2/3AA180, 2/3AA200, 2/3AA250, 2/3AA300, 2/3AA350, 2/3AA400, 2/3AA450, 2/3AA500, 2/3AA550, 2/3AA600, 2/3AA700, 2/3AA800, 2/3AA900, 2/3AA1000 etc

1/3AA50, 1/3AA60, 1/3AA80, 1/3AA100, 1/3AA120, 1/3AA150, 1/3AA180, 1/3AA200, 1/3AA250, 1/3AA300, 1/3AA350 etc

2/3A800, 2/3A1000, 2/3A1100, 2/3A1200, 2/3A1300, 2/3A1500, 2/3A1600, 2/3A1800, 2/3A2000

4/5A1000, 4/5A1200, 4/5A1500, 4/5A1600, 4/5A1800, 4/5A2000, 4/5A2100, 4/5A2200, 4/5A2500

3/5AA100, 3/5AA200, 3/5AA300, 3/5AA400, 3/5AA500, 3/5AA600, 3/5AA700, 3/5AA800, 3/5AA1000, 2/3AA1100

(1.2V 2.4V 3.6V 4.8V 6.0V 7.2V 8.4V 9.6V 10.8V 12V 13.2V 14.4V 15.6V) etc

Ni-MH Button Battery:

10mAh, 20mAh, 30mAh, 40mAh, 50mAh, 60mAh, 70mAh, 80mAh, 100mAh, 110mAh, 120mAh, 160mAh, 230mAh, 250mAh, 300mAh, 330mAh, 350mAh, 400mAh, 500mAh, 600mAh, 650mAh, 700mAh, 800mAh, 900mAh, 1000mAh.etc

(1.2V 2.4V 3.6V 4.8V 6.0V 7.2V 8.4V 9.6V 10.8V 12V) etc

UFI code: No available data.

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

• **Relevant identified uses:**

Power supply.

• **Uses advised against:**

No available data.

• **Reason why uses advised against:**

No available data.

• **1.3 Details of the supplier of the safety data sheet**

• **Manufacturer/Supplier:**

Ningbo Sellersgreat Lighting Technology Co., Ltd.

Room 402, Building 9 Ningbo Smart Park Phase II, 315000 Ningbo, China.

Post code: 315000

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

Tel: +86-574-89077016

Email: nicolesun@sellersgreat-light.com

National contact: Nicole

• **Only Representative/other EU contact point:**

No information available.

• **1.4 Emergency telephone number**

Tel: +86-574-89077016 (24 hours available)

• **1.5 Remark:**

This product is likely to be classified as article with substances not intended to be released and is out of scope of a SDS as set out in Regulation (EC) No 1907/2006. This SDS is generated for applicant's reference only.

SECTION 2: Hazards identification

• **2.1 Classification of the substance or mixture**

• **2.1.1 Classification according to regulation (EC) 1272/2008:**

Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Skin Irrit.2, H315	Additivity approach
Skin Sens. 1, H317	Cut-off values/concentration limits approach
Eye Irrit. 2, H319	Additivity approach
Resp.Sens.1, H334	Cut-off values/concentration limits approach
Muta. 2, H341	Cut-off values/concentration limits approach
Carc. 1A, H350i	Cut-off values/concentration limits approach
Repr. 1B, H360D	Cut-off values/concentration limits approach
STOT RE 1, H372	Cut-off values/concentration limits approach
Aquatic Chronic 2, H411	Summation method

• **2.1.2 Additional information:**

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

• **2.2 Label elements**

• **Labeling according to Regulation (EC) No 1272/2008:**

The product is labelled according to CLP Regulation.

• **Hazard pictograms:**



GHS08 GHS09

• **Signal word:**

Danger

• **Hazard-determining components of labelling:**

Nickel Dihydroxide

Lanthanum, compound with nickel (1:5)

• **Hazard statements:**

H315 Causes skin irritation

H317 May cause an allergic skin reaction

Safety Data Sheet

Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

- H319 Causes serious eye irritation
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H341 Suspected of causing genetic defects
 H350i May cause cancer by inhalation
 H360 May damage the unborn child
 H372 Causes damage to organs through prolonged or repeated exposure
 H411 Toxic to aquatic life with long lasting effects
- **Precautionary statement:**
- P201 Obtain special instructions before use.
 P260 Do not breathe dust.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ eye protection/ face protection.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P391 Collect spillage.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

• **Supplemental label elements:**

Contains: Cobalt oxide.

Restricted to industrial / professional users only.

• **2.3 Other hazards**

None of the ingredients ($\geq 0.1\%$) meets the criteria for PBT/vPvB in accordance with Annex XIII.

None of the ingredients ($\geq 0.1\%$) are identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

SECTION 3: Composition/information on ingredients

• **3.2 Mixtures**

• **Description of the mixture:**

Ni-MH cylindrical Battery; Ni-MH Button Battery.

Ingredients:						
Substance	CAS No.	Index No.	EC No.	w/w, %	CLP Classification	SCL/M-factor/ATE
Iron	7439-89-6	-	231-096-4	45	None	-
Nickel	7440-02-0	028-002-00-7	231-111-4	23	Carc. 2, H351 STOT RE 1, H372	-
Nickel dihydroxide	12054-48-7	028-008-00-X	235-008-5	11	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Acute Tox. 4, H332 Resp. Sens. 1, H334 Muta. 2, H341 Carc. 1A, H350i Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1,	ATE (oral)=1515 mg/kg ATE (inhal.) =1.2 mg/l (dust) M=1 M(Chronic)=1

Safety Data Sheet

Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

					H410	
Lanthanum, compound with nickel (1:5)	12196-72-4	-	235-372-5	7.28	Flam. Sol. 1, H228 Skin Sens. 1, H317 Carc. 1, H350	-
Polypropylene	9003-07-0	-	-	6	None	-
Polyvinyl chloride	9002-86-2	-	-	4.5	None	-
Water	7732-18-5	-	231-791-2	2	None	-
Potassium hydroxide	1310-58-3	019-002-00-8	215-181-3	1	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1A, H314	ATE (oral)=500 mg/kg Skin Corr. 1A, H314: C _≥ 5% Skin Corr. 1B, H314: 2%≤C<5% Skin Irrit. 2, H315: 0.5%≤C<2% Eye Irrit. 2, H319: 0.5%≤C<2%
Cobalt oxide	1307-96-6	027-002-00-4	215-154-6	0.2	Acute Tox. 3, H301 Skin Sens. 1, H317 Acute Tox. 2, H330 Resp. Sens. 1, H334 Carc. 1B, H350i Repr. 1B, H360F Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE (oral)=202 mg/kg ATE (inhal.)=0.05 mg/l (dust/mist) M=10 M(Chronic)=10
Lithium hydroxide, monohydrate	1310-66-3	-	-	0.02	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318	ATE (oral)=210 mg/kg ATE (dermal)=300 mg/kg ATE (inhal.)=0.91 mg/l (dust/mist)

Additional information:

Full text of H- and EUH-statements, see SECTION 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General notes:**

IF exposed or concerned: Get medical advice/attention.

- **Following inhalation:**

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

- **Following skin contact:**



Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

Wash skin with plenty of soap and water.

If there are signs of irritation or other symptoms, seek medical attention.

• **Following eye contact:**

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation occurs: Get medical advice/attention.

• **Following ingestion:**

Rinse mouth.

Call a POISON CENTER/doctor if you feel unwell.

• **Self-protection of the first aider:**

Wear disposable, latex free gloves.

• **4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are as indicated in sections 2 and 11.

• **4.3 Indication of any immediate medical attention and special treatment needed:**

Treat according to symptom, there is not known specific medicine.

SECTION 5: Fire-fighting measures

• **5.1 Extinguishing media**

• **Suitable extinguishing agents:**

Use CO₂, chemical powder, water spray or alcohol resistant foam to extinguish.

• **Unsuitable extinguishing media:**

Water with full jet.

• **5.2 Special hazards arising from the substance or mixture**

• **Hazardous combustion products:**

May produce allergic / corrosive gas in air under fire.

• **5.3 Advice for firefighters**

• **Protective equipment:**

Wear self-contained breathing apparatus for firefighting.

SECTION 6: Accidental release measures

• **6.1 Personal precautions, protective equipment and emergency procedures**

• **6.1.1 For non-emergency personnel**

• **Protective equipment:**

Wear protective gloves/ protective clothing/ eye protection/ face protection/ respiration protection.

• **Emergency procedures:**

Evacuate immediately.

Ensure adequate ventilation.

Avoid breathing dust.

Avoid contact with skin and eyes.

Avoid release to the environment.

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

• **6.1.2 For emergency responders**

• **Personal protective equipment:**

Wear protective gloves/ protective clothing/ eye protection/ face protection/ respiration protection.

• **6.2 Environmental precautions:**

Prevent further leakage or spillage if safe to do so.

Prevent spillage from entering drains, sewer, basement or confined areas.

If the spillage contaminates rivers, lakes or drains inform respective authorities.

• **6.3 Methods and material for containment and cleaning up**

• **6.3.1 For containment:**

Bunding, covering of drains.

• **6.3.2 For cleaning up:**

Pick up mechanically.

• **6.3.3 Other information:**

Dispose contaminated material as waste according to section 13.

• **6.4 Reference to other sections:**

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

SECTION 7: Handling and storage

• **7.1 Precautions for safe handling:**

• **Protective measures:**

Obtain special instructions before use.

Ensure adequate ventilation at workplace.

Wear protective gloves/protective clothing/eye protection/face protection/respiration protection.

Do not eat, drink or smoke when using this product.

Avoid breathing dust.

Avoid contact with skin and eyes.

Avoid release to the environment.

• **Measures to prevent fire:**

Normal measures for preventive fire protection.

• **Measures to prevent aerosol and dust generation:**

Ensure well ventilation at workplace.

• **Measures to protect the environment:**

Avoiding spills or keeping away from drains.

• **Advice on general occupational hygiene:**

Wear protective gloves/ protective clothing/ eye protection/ face protection/ respiration protection.

• **7.2 Conditions for safe storage, including any non-compatibility**

• **Technical measures and storage conditions:**

Store in a cool and well-ventilated place.

• **Packaging materials:**

No specific material.

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

• Requirements for storage rooms and vessels:

Keep container tightly closed.

Containers have to be labelled clearly and permanently.

• Storage class:

8B.

• Further information on storage conditions:

Store locked up.

• 7.3 Specific end use(s)
• Recommendations:

See section 1.2.

• Industrial sector specific solutions:

No further information.

SECTION 8: Exposure controls/personal protection

• 8.1 Control parameters
• Ingredients with limit values that require monitoring at the workplace:

Country	Limit value - Eight hours	Limit value - Short term
9002-86-2 Polyvinyl chloride		
Belgium	10 mg/m ³	-
Germany (DFG)	0.3 mg/m ³ Respirable fraction; Multiplied with the material density	800ppm; 3000 mg/m ³ Respirable fraction; Multiplied with the material density; 15 minutes average value
Ireland	10 mg/m ³ Inhalable fraction; 1 mg/m ³ Respirable fraction	-
Latvia	5 mg/m ³	-
Sweden	1 mg/m ³	-
United Kingdom	10 mg/m ³ Inhalable fraction; 4 mg/m ³ Respirable fraction	-
1310-58-3 Potassium hydroxide		
Austria	2 mg/m ³ inhalable aerosol	-
Denmark	2 mg/m ³	2 mg/m ³
Finland	-	2 mg/m ³ Ceiling limit value
France	-	2 mg/m ³
Hungary	2 mg/m ³	2 mg/m ³
Ireland	-	2 mg/m ³ 15 minutes reference period
Poland	0.5 mg/m ³	1 mg/m ³
Spain	2 mg/m ³	-
Sweden	1 mg/m ³	2 mg/m ³ Ceiling limit value
United Kingdom	-	2 mg/m ³

• DNELs:

DNEL type	DNEL worker value	DNEL consumer value
12054-48-7 Nickel dihydroxide		
Systemic effects	Long-term, inhalation exposure	50 µg/m ³
		60 ng/m ³

Safety Data Sheet

Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

	Acute /short term, inhalation exposure	1 403 mg/m ³	159 mg/m ³
	Long-term, oral exposure	-	13 µg/kg bw/day
	Acute /short term, oral exposure	-	370 µg/kg bw/day
Local effects	Long-term, inhalation exposure	50 µg/m ³	60 µg/m ³
	Acute /short term, inhalation exposure	18.9 mg/m ³	1.8 mg/m ³
	Long-term, dermal exposure	650 µg/cm ²	-
1310-58-3 Potassium hydroxide			
Local effects	Long-term, inhalation exposure	1 mg/m ³	1 mg/m ³

• PNECs:

PNEC type	Value
12054-48-7 Nickel dihydroxide	
Freshwater	7.1 µg/L
Intermittent releases (freshwater)	0 ng/L
Marine water	8.6 µg/L
Intermittent releases (marine water)	0 ng/L
Sewage treatment plant (STP)	330 µg/L
Sediment (freshwater)	109 mg/kg sediment dw
Sediment (marine water)	109 mg/kg sediment dw
Soil	29.9 mg/kg soil dw
Secondary poisoning	120 µg/kg food

• Additional information:

The lists valid during the marking were used as basis.

• 8.2 Exposure controls

• Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.

• 8.2.1 Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice.

Wash hands and face before breaks and at the end of work.

See section 7 for information about design of technical facilities.

• 8.2.2 Personal protection equipment
• Eye/face protection:


Safety glasses

Protective goggles with side-shields.

• Skin protection
• Hand protection:


Protective gloves

Gloves made from butyl rubber Neoprene™ rubber, nitrile rubber (thickness > 0.11mm; breakthrough times up to 480 minutes).

• Other skin protection:

Safety Data Sheet

Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

Face protection

Safety boots

Safety overalls

Face shield, gauntlets, boots, bodysuit are recommended.

• Respiration protection:

Respiratory equipment

Use positive pressure breathing mask if concentrations in air could exceed occupational exposure standard.

• Thermal hazards:

The gauntlets, boots, bodysuit and other personal protective equipment must be flame retardant and no heat-conducting.

• 8.2.3 Environmental exposure controls:

Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

• Physical state	Solid
• Color	Green
• Odor & Odor threshold	Odorless
• Melting point/freezing point (or softening point/range)	Not determined
• Boiling point or initial boiling point and boiling range	Not determined
• Flammability	Not flammable solid
• Lower and upper explosion limit	Not applicable
• Flash point	Not applicable
• Auto-ignition temperature	Not applicable
• Decomposition temperature	Not determined
• pH	Not determined
• Kinematic viscosity (mm²/s)	Not applicable
• Solubility	Not determined
• Partition coefficient n-octanol/water (log value)	Not applicable
• Vapor pressure	Not applicable
• Density and/or relative density	Not determined
• Relative vapor density	Not applicable
• Particle characteristics	Not determined

• 9.2 Other information
• 9.2.1 Information with regard to physical hazard classes:

• Explosives	Not applicable
• Flammable gases	Not applicable
• Aerosols	Not applicable
• Oxidising gases	Not applicable
• Gases under pressure	Not applicable

Safety Data Sheet

Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

• <i>Flammable liquids</i>	<i>Not applicable</i>
• <i>Flammable solids</i>	<i>Not applicable</i>
• <i>Self-reactive substances and mixtures</i>	<i>Not applicable</i>
• <i>Pyrophoric liquids</i>	<i>Not applicable</i>
• <i>Pyrophoric solids</i>	<i>Not applicable</i>
• <i>Self-heating substances and mixtures</i>	<i>Not applicable</i>
• <i>Substances and mixtures, which emit flammable gases in contact with water</i>	<i>Not applicable</i>
• <i>Oxidizing liquids</i>	<i>Not applicable</i>
• <i>Oxidizing solids</i>	<i>Not applicable</i>
• <i>Organic peroxides</i>	<i>Not applicable</i>
• <i>Corrosive to metals</i>	<i>Not applicable</i>
• <i>Desensitised explosives</i>	<i>Not applicable</i>
• 9.2.2 Other safety characteristics	
• <i>Mechanical sensitivity</i>	<i>Not applicable</i>
• <i>Self-accelerating polymerisation temperature</i>	<i>Not applicable</i>
• <i>Formation of explosible dust/air mixtures</i>	<i>Not applicable</i>
• <i>Acid/alkaline reserve</i>	<i>Not applicable</i>
• <i>Evaporation rate</i>	<i>Not applicable</i>
• <i>Miscibility</i>	<i>Not applicable</i>
• <i>Conductivity</i>	<i>Not applicable</i>
• <i>Corrosiveness</i>	<i>Not applicable</i>
• <i>Gas group</i>	<i>Not applicable</i>
• <i>Redox potential</i>	<i>Not applicable</i>
• <i>Radical formation potential</i>	<i>Not applicable</i>
• <i>Photocatalytic properties</i>	<i>Not applicable</i>
• <i>Other physical and chemical parameters</i>	<i>Not determined</i>

SECTION 10: Stability and reactivity

• 10.1 Reactivity:

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

• 10.2 Chemical stability:

Under storage at normal ambient temperatures, the product is stable.

• 10.3 Possibility of hazardous reactions:

No known hazardous reaction.

• 10.4 Conditions to avoid:

High temperature.

• 10.5 Incompatible materials:

Strong oxidizing agent and acids.

• 10.6 Hazardous decomposition products:



Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

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

Acute toxicity:

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

Species	Effective Dose	Results	Method/Source
12054-48-7 Nickel dihydroxide			
Rat	LD50-oral	1520 mg/kg	Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 1, Pg. 684, 1992.
Rat	LD50-dermal	>2000 mg/kg	Research and Consulting Company, Technical Reports. Vol. NOTOX1074/1338, Pg. 1988.
Rat	LC50-inhalation	1.2 mg/l/4h	Toxicological Data, compiled by the National Institute of Health (NIH), USA, selected and distributed by Technical Database Services (TDS), New York, 2009.
1310-58-3 Potassium hydroxide			
Rat	LD50-oral	273 mg/kg	Toxicological Data, compiled by the National Institute of Health (NIH), USA, selected and distributed by Technical Database Services (TDS), New York, 2009.

Skin corrosion/irritation:

Causes skin irritation.

Serious eyes damage/ irritation:

Causes serious eye irritation.

Respiratory or skin sensitization:

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity:

Suspected of causing genetic defects.

Carcinogenicity:

May cause cancer.

Reproductive toxicity:

May damage the unborn child.

STOT-single exposure:

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

STOT-repeated exposure:

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard:

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

11.2 Information on other hazards

Safety Data Sheet

Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

11.2.1 Endocrine disrupting properties:

None of the ingredients ($\geq 0.1\%$) are considered to have endocrine-disrupting properties with respect to humans, as none of them meet the criteria set out in section A of Regulation (EU) No 2017/2100.

11.2.2 Other information:

No known other relevant information on adverse health effects.

SECTION 12: Ecological information

12.1 Toxicity:

Species	Effect dose	Test duration	Value
12054-48-7 Nickel dihydroxide			
Pimephales promelas	LC50	96h	0.4 -320mg/L
Fundulus heteroclitus	LC50	96h	24.8 -350 mg/L
Daphnia magna	LC50	48h	0.013 - 4970 mg/L
Mytilus trossulus	EC50	48h	0.15- 4.66 mg/L

12.2 Persistence and degradability: No available data.

12.3 Bio-accumulative potential: No available data.

12.4 Mobility in soil:

CAS	Substance	Surface tension (mN/m)	Log Koc
12054-48-7	Nickel Di hydroxide	-	2.86

12.5 Results of PBT and vPvB assessment:

This mixture does not contain any substances ($\geq 0.1\%$) that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties:

None of the ingredients ($\geq 0.1\%$) are considered to have endocrine-disrupting properties with respect to non-target organisms, as none of them meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7 Other adverse effects:

No known other adverse effects.

12.8 Additional ecological information
General notes:

WGK3 (German Regulation) (self-assessment): highly hazardous to water.

Do not allow large quantities of the product to reach ground water, water course or sewage system.

SECTION 13: Disposal consideration

13.1 Waste treatment methods
Recommendation:

Must not be disposed together with household garbage.

13.2 Un-cleaned packaging
Recommendation:

Dispose of contents/container in according to the local/regional/national/ international regulation.

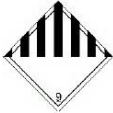
Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

SECTION 14: Transport information

· ADR/ADN/RID (2025 Edition)	This product is not subject to ADR/RID/ADN	
· IATA-DGR (66th)	This product is not subject to IATA-DGR for special provision A199	
· 14.1 UN number or ID number		
· IMO/IMDG (42-24)	UN3496	
· 14.2 UN proper shipping name		
· IMO/IMDG (42-24)	Batteries, nickel-metal hydride	
· 14.3 Transport hazard class (es)		
· IMO/IMDG (42-24)		
Class	9 Miscellaneous dangerous substances and articles.	
Label	9	
· 14.4 Packing group		
· IMO/IMDG (42-24)	-	
· 14.5 Environmental hazards	Yes	
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles	
· Danger code (Kemler)	90	
· EMS number	F-A, S-J	
· 14.7 Maritime transport in bulk according to IMO instruments	IBC08	
· Additional information		
· Sea transport (IMO-IMDG)		
Limited quantity	0	
Special provisions	117, 963	

SECTION 15: Regulatory information

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

· MAK (German Maximum Workplace Concentration):

12054-48-7	Nickel dihydroxide	1
12196-72-4	Lanthanum, compound with nickel (1:5)	1
9002-86-2	Polyvinyl chloride	4

· Directive 2012/18/EU

· Named dangerous substances-ANNEX I:

None of the ingredients are listed.

· Seveso category:

E2 Hazardous to the Aquatic Environment.

· Qualifying quantity (tonnes) for the application of lower-tier requirements:

200 ton(net).

· Qualifying quantity (tonnes) for the application of upper-tier requirements:

500 ton(net).

· National regulations.



Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

• Water hazard class:

WGK3 (German Regulation) (self-assessment): highly hazardous to water.

• Other regulations, limitations and prohibitive regulations

• SVHC Candidate list of REACH Regulation Annex XIV Authorization:

None of the ingredients are listed.

• REACH Regulation Annex XVII Restriction:

12054-48-7	Nickel dihydroxide	Entry no.29
12196-72-4	Lanthanum, compound with nickel (1:5)	Entry no.29

• REACH Regulation Annex XIV Authorization List:

None of the ingredients are listed.

• 15.2 Chemical safety assessment:

A Chemical Safe Assessment has not been carried out.

SECTION 16: Other information

• 16.1 Indication of changes:

None.

• 16.2 Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

PBT: Persistent, Bio accumulative and Toxic

vPvB: very persistent and very bio accumulative

SVHC: Substance of Very High Concern

LD50: Lethal dose, 50 percent

LC50: Lethal concentration, 50 percent

EC50: Concentration of maximal effect, 50 percent

NOEC: No observed effect concentration

Flam. Sol. 1: Flammable solids, hazard category 1

Met. Corr. 1: Corrosive to metals, hazard category 1

Acute Tox. 3: Acute toxicity, hazard category 3

Acute Tox. 4: Acute toxicity, hazard category 4

Skin Corr. 1A: Skin corrosion/irritation, hazard category 1A

Skin Corr. 1B: Skin corrosion/irritation, hazard category 1B

Skin Irrit. 2: Skin corrosion/irritation, hazard category 2

Skin Sens. 1: Skin sensitization, hazard category 1

Eye Dam. 1: Eye damage/irritation, hazard category 1

Eye Irrit. 2: Eye damage/irritation, hazard category 2

Acute Tox. 2: Acute toxicity, hazard category 2

Resp. Sens. 1: Respiratory sensitization, hazard category 1



Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

Muta. 2: Germ cell mutagenicity, hazard category 2
Carc. 1A: Carcinogenicity, hazard category 1A
Repr. 1B: Reproductive toxicity, hazard category 1B
STOT RE 1: Specific target organ toxicity after repeated exposure, hazard category 1
Aquatic Acute 1: Short-term (acute) aquatic hazard, hazard category 1
Aquatic Chronic 1: Long-term (chronic) aquatic hazard, hazard category 1
Aquatic Chronic 2: Long-term (chronic) aquatic hazard, hazard category 2

• 16.3 Key literature references and sources for data:

<https://echa.europa.eu/>
<https://chem.nlm.nih.gov/>
<https://www.osha.gov/>
<http://www.unece.org/>
<http://www.imo.org/>
<https://www.dguv.de/>
<https://epa.govt.nz/>
<http://www.ilo.org/>
<https://www.phmsa.dot.gov/>

• 16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]:

See section 2.1 (classification).

• 16.5 Relevant H- and EUH-phrases (number and full text):

H228 Flammable solid
H290 May be corrosive to metals
H301 Toxic if swallowed
H302 Harmful if swallowed
H311 Toxic in contact with skin
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H319 Causes serious eye irritation
H330 Fatal if inhaled
H331 Toxic if inhaled
H332 Harmful if inhaled
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341 Suspected of causing genetic defects
H350 May cause cancer
H360FD May damage the unborn child
H372 Causes damage to organs through prolonged or repeated exposure
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects

• 16.6 Training advice:

Workers must be trained in general and specific aspects of safe work procedures for this chemical. Workers need easy to understand

Safety Data Sheet
Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: July 14, 2025

Version No.: 3.0

Revision: July 14, 2025

Trade Name: Ni-MH cylindrical Battery; Ni-MH Button Battery

guidelines and instructions for safe working with this chemical. Instructions, guidelines and legally required documents need to be available for workers in easy to understand language.

· 16.7 Further information:

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, its amendment Regulation (EU) No 2020/878 and (EC) No 1272/2008.

DISCLAIMER OF LIABILITY:

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

End of safety data sheet