



# Material Safety Data Sheet

MSDS Code: EBO2001008-M023 Date of Issue: January 5, 2021  
NI-CD RECHARGEABLE BATTERY Page 1 of 6

## 1. Identification Of Substance

### Product Details

**Product Name:** NI-CD RECHARGEABLE BATTERY

**Product Model:** Ni-CD: AA100mAh, AA150mAh, AA200mAh, AA250mAh, AA300mAh, AA350mAh, AA400mAh, AA450mAh, AA500mAh, AA600mAh, AA700mAh, AA800mAh, AA900mAh, AA1000mAh, AA1100mAh, AA1200mAh, AA1300mAh, AA1400mAh, AA1500mAh, AA1600mAh, AA1700mAh, AA1800mAh, AA1900mAh, AA2000mAh, AA2100mAh, AA2200mAh, AA2300mAh, AA2400mAh, AA2500mAh, AA2600mAh

Ni-CD: AAA100mAh, AAA150mAh, AAA200mAh, AAA250mAh, AAA300mAh, AAA350mAh, AAA400mAh, AAA450mAh, AAA500mAh, AAA600mAh, AAA700mAh, AAA800mAh, AAA900mAh, AAA1000mAh

Ni-CD: 2/3AA100mAh, 2/3AA150mAh, 2/3AA200mAh, 2/3AA250mAh, 2/3AA300mAh, 2/3AA350mAh, 2/3AA400mAh, 2/3AA450mAh, 2/3AA500mAh, 2/3AA550mAh, 2/3AA600mAh

Ni-CD: 2/3AAA100mAh, 2/3AAA150mAh, 2/3AAA200mAh, 2/3AAA250mAh, 2/3AAA300mAh, 2/3AAA350mAh, 2/3AAA400mAh, 2/3AAA450mAh, 2/3AAA500mAh, 2/3AAA550mAh, 2/3AAA600mAh

Ni-CD: 4/5AA100mAh, 4/5AA200mAh, 4/5AA300mAh, 4/5AA350mAh, 4/5AA400mAh, 4/5AA500mAh, 4/5AA600mAh, 4/5AA700mAh, 4/5AA800mAh, 4/5AA900mAh, 4/5AA1000mAh, 4/5AA1100mAh, 4/5AA1200mAh, 4/5AA1300mAh, 4/5AA1400mAh, 4/5AA1500mAh, 4/5AA1600mAh, 4/5AA1700mAh, 4/5AA1800mAh, 4/5AA1900mAh

Ni-CD: 4/5SC600mAh, 4/5SC700mAh, 4/5SC800mAh, 4/5SC900mAh, 4/5SC1000mAh, 4/5SC1100mAh, 4/5SC1200mAh, 4/5SC1300mAh, 4/5SC1400mAh, 4/5SC1500mAh, 4/5SC1600mAh, 4/5SC1700mAh, 4/5SC1800mAh, 4/5SC1900mAh, 4/5SC2000mAh

Ni-CD: SC600mAh, SC700mAh, SC800mAh, SC900mAh, SC1000mAh, SC1100mAh, SC1200mAh, SC1300mAh, SC1400mAh, SC1500mAh, SC1600mAh, SC1700mAh, SC1800mAh, SC1900mAh, SC2000mAh, SC2200mAh, SC2400mAh, SC2600mAh, SC2800mAh, SC3000mAh

Ni-CD: C1500mAh, C1600mAh, C1700mAh, C1800mAh, C1900mAh, C2000mAh, C2100mAh, C2200mAh, C2300mAh, C2400mAh, C2500mAh, C2600mAh, C2700mAh, C2800mAh, C2900mAh, C3000mAh, C3500mAh, C4000mAh



# Material Safety Data Sheet

MSDS Code: EBO2001008-M023 Date of Issue: January 5, 2021  
NI-CD RECHARGEABLE BATTERY Page 2 of 6

Ni-CD: D3000mAh, D3500mAh, D4000mAh, D4500mAh, D5000mAh,  
D6000mAh, D7000mAh, D8000mAh

**Product use:** Our batteries are mainly applied to cordless phones, walkmans, solar lights, electrical drills, shavers, emergency lights, and back-up power, etc.

**Manufacturer/Supplier By:**

## 2. Hazards Identification

### Hazard description:

A sealed cell/battery is not hazardous in normal use.

In case of mistreatment (abusive charge, reverse charge, external short circuit...) and in case of fault, some electrolyte can leak from the cell through the sealing system. In these cases refer to the risks of potassium hydroxide solution (corrosive, pH > 14). The electrode materials are only hazardous, if the materials are released by mechanical damaging of the cell or if exposed to fire.

## 3. Composition/Data On Components

COMPONENT	CAS #	% by wt.
NiOH	12054-48-7	16.7%
Cd(OH) <sub>2</sub>	21041-95-2	26.4%
FeO	1345-25-1	25.2%
Water	7732-18-5	18.3%
KOH	1310-58-3	8.0%
NaOH	1310-73-2	2.8%
Graphite powder	7782-42-5	2.6%

## 4. First aid Measures

**Eyes:** Irrigate thoroughly with water for at least 15 minutes. Obtain medical attention.

**Skin:** Wash off skin thoroughly with water. Remove contaminated clothing and wash before reuse. In severe cases obtain medical attention.

**Inhalation:** Remove from exposure, rest and keep warm. In severe cases obtain medical

EU



# Material Safety Data Sheet

MSDS Code: EBO2001008-M023 Date of Issue: January 5, 2021  
NI-CD RECHARGEABLE BATTERY Page 3 of 6

**Ingestion:** attention.  
Wash out mouth thoroughly with water and give plenty of water to drink. Obtain medical attention.

**Further treatment:** All cases of eye contamination, persistent skin irritation and casualties who have swallowed this substance or been affected by breathing its vapours should be seen by a Doctor.

## 5. Fire Fighting Measures

**Extinguishing Media:** Use foam, dry powder or carbon dioxide (CO<sub>2</sub>), as appropriate.

**Extinguishing media with limited suitability:** Water is only applicable for incipient fire.

**Special Fire-Fighting Procedures:** Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6. Accidental Release Measures

**Person related measures:** Wear personal protective equipment adapted to the situation (protection gloves, cloth).

**Environment protection measures:** In the event of battery rupture, prevent skin contact and collect all released material in a plastic lined container.  
Dispose off according to the local law and rules.  
Avoid leached substances to get into the earth, canalization or waters.

**Treatment for cleaning:** If battery casing is dismantled, small amounts of electrolyte may leak. Pack the battery including ingredients as described above. Then clean with water (diluted acetic acid may be helpful).

## 7. Handling And Storage

Prohibit mechanical or electrical damage battery.  
Stored in a dry, cool and ventilated environment, to avoid temperature changes or high temperature.  
Keep away from heat, avoid prolonged sun exposure.  
Against short circuit, overcharge, forced discharge, or in a fire.  
Battery disassembly, crush, fire or high temperatures can cause fire or explosion, prohibit short-circuit or error operation.

## 8. Exposure Controls And Personal Protection

**Respiratory protection:** If the battery leaks, the need for full ventilation.





EU

**Hand Protection:** Under normal use, do not.

**Personal Protection:** Under normal use, do not.

**Other protection:** Under normal use, do not.

**If the battery leaks, must wear the following protection products.**

	<b>Respiratory protection</b>	In all fire situations, use self-contained breathing apparatus.
	<b>Hand protection</b>	In the event of leakage wear gloves.
	<b>Eye protection</b>	Safety glasses are recommended during handling.
	<b>Other</b>	In the event of leakage, wear chemical apron.

## 9. Physical And Chemical Properties

### General Information

**Appearance characters:** Mixed with odorless battery

**Voltage:** 1.2V

**Capacity:** 8000MAH

**pH:** 12

## 10. Stability And Reactivity

**Stability:** Stable

### Hazardous Decomposition

**Products:** N/A.

**Conditions to Avoid:** Heating, mechanical abuse and electrical abuse.

**Hazardous Polymerization:** If leaked, forbidden to contact with strong oxidizers, mineral acids, strong



# Material Safety Data Sheet

MSDS Code: EBO2001008-M023 Date of Issue: January 5, 2021  
NI-CD RECHARGEABLE BATTERY Page 5 of 6

alkalis, halogenated hydrocarbons.

## 11. Toxicological Information

<b>Primary irritant effect:</b>	None, unless battery ruptures. In the event of exposure to internal contents, corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation.
<b>Inhalation:</b>	Lung irritant.
<b>Skin contact:</b>	Skin irritant
<b>Eye contact:</b>	Eye irritant.
<b>Ingestion:</b>	Tissue damage to throat and gastro-respiratory tract if swallowed.
<b>Medical conditions generally aggravated by exposure:</b>	In the event of exposure to internal contents, eczema, skin allergies, lung injuries, asthma and other respiratory disorders may occur.

## 12. Ecological Information

<b>Environmental Impact:</b>	Proper use and disposal of the battery will not harm the environment. Dispose of the battery, away from water, rain and snow.
------------------------------	--

## 13. Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation  
Dispose of the batteries in accordance with approved local, state, and federal requirements. Consult state environmental agency and/or federal EPA.

## 14. Transport Information

Nickel-Cadmium batteries (sometimes referred to as "Dry cell" batteries) are not listed as dangerous goods under the International Civil Aviation Organization (ICAO), International Air Transport Association (IATA), 61th edition 2020 and U.S. Department of Transportation (DOT) regulations, 49 CFR. These batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following Special Provisions; Special Provision A123 in the ICAO Technical Instructions and IATA Dangerous Goods Regulations and Special Provision 130 of the DOT. These batteries are protected and to prevent short circuits.

In addition, the ICAO and IATA regulations require the words "Not Restricted" and "Special Provision A123" be provided on the air waybill, when an air waybill is issued. By ocean the International Maritime Organization (IMO), does not regulate these batteries.

International Maritime Organization (IMO) IMDG Code regulated these products as UN 3496 BATTERIES, NICKEL

EU



# Material Safety Data Sheet

MSDS Code: EBO2001008-M023 Date of Issue: January 5, 2021  
NI-CD RECHARGEABLE BATTERY Page 6 of 6

METAL HYDRIDE, class 9 dangerous goods with Special Provision 117 and 963 assigned SP117 Only regulated when transported by sea.

SP963

Nickel-CD batteries packed with or contained in equipment are not subject to the provisions of this Code. All other nickel-metal hydride cells or batteries shall be securely packed and protected from short circuit. They are not subject to other provisions of this Code provided that they are loaded in a cargo transport unit in a total quantity of less than 100 Kg gross mass. When loaded in a cargo transport unit in a total quantity of 100 Kg gross mass or more, they are not subject to other provisions of this Code except those of 5.4.1, 5.4.3 and column (16) of the dangerous good list in Chapter 3.2.

## 15. Regulations

Law Information

- 《Dangerous Goods Regulation》
- 《Recommendations on the Transport of Dangerous Goods Model Regulations》
- 《International Maritime Dangerous Goods》
- 《Technical Instructions for the Safe Transport of Dangerous Goods》
- 《Classification and code of dangerous goods》

OSHA Hazard Communication Standard Status

Toxic Substances Control Act (TSCA) Status

SARA Title III

RCRA

In accordance with all Federal, State and Local laws

## 16. Other Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.



EU

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2021-07-26. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.