



Ascent Battery Supply, LLC
 1325 Walnut Ridge Drive
 Hartland, Wisconsin 53029

Safety Data Sheet (SDS)

Nickel Metal Hydride (NiMH) Batteries

The information and recommendations below are believed to be accurate at the date of document preparation. Ascent Battery Supply makes no warranty or merchantability or any other warranty, express or implied, with respect to this information and assumes no liability resulting from its use. This SDS provides guidelines for safe use and handling of product. It does not, and cannot, advise all possible situations. All specific uses of this product must be evaluated by the end user to determine if additional safety precautions should be taken.

SECTION 1 - IDENTIFICATION

Product Name	Nickel Metal Hydride Battery		
Common Name(s)	NiMH, Nickel Metal		
Synonyms	Nickel Metal Hydride Rechargeable Battery		
DOT Description	Dry Battery		
Chemical Name	Nickel Metal Hydride Secondary Battery		
Distributed By	Ascent Battery Supply, LLC	Emergency Number	INFOTRAC (800) 535-5053
Address	1325 Walnut Ridge Drive Hartland, Wisconsin 53029	International Emergency Number	INFOTRAC (352) 323-3500 (Collect)

SECTION 2 – HAZARD(S)

Unusual Fire and Explosion Hazards Cells may rupture when exposed to excessive heat. This could result in the release of flammable or corrosive materials. Short circuited batteries may cause burns.

SECTION 3 – COMPOSITION

Chemical Name	CAS No.	Wt. Percentage %
Cobalt Oxide	1307-96-6	2-6%
Nickel Hydroxide	12054-48-7	23-28%
Hydrogen Absorbing Alloy (proprietary)	n/a	30-35%
Potassium Hydroxide (electrolyte)	1310-58-3	< 2
Sodium Hydroxide (electrolyte)	1310-73-2	< 1
Lithium Hydroxide (electrolyte)	1310-66-3	< 1
Other/Housing	n/a	balance

SECTION 4 – FIRST AID MEASURES

Inhalation If exposed to fumes or dust; get fresh air. If symptoms persist seek medical attention

Eyes and Skin **Skin:** If exposed to internal battery content, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes; wash with soap and water
Eyes: If exposed to internal battery content, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes; get immediate medical attention.

Ingestion Ingestion of battery chemicals can be harmful. Seek medical attention immediately. Call The National Battery Ingestion Hotline (202-625-3333) 24 hours a day, for procedures treating ingestion of chemicals. Do not induce vomiting.

SECTION 5 – FIRE-FIGHTING MEASURES

Extinguisher Media Any class of extinguishing medium can be used on these batteries or their packing material.

Special Fire Fighting Procedures Wear self-contained breathing apparatus to avoid inhalation of hazardous fumes.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

In case of accidental rupture or release: prevent skin and eye contact and collect all released material in a plastic lined metal container. Leaking batteries should be handled with gloves. Wear protective clothing. Use a self-contained breathing apparatus if in the presence of chemical vapor. See also: sections 4, 5, and 8.

SECTION 7 – HANDLING AND STORAGE

1. Store in a cool, dry, and ventilated area which is subject to low temperature variation.
2. Do not store unpacked cells together: avoid cells shorting to one another – especially in a charged state.
3. Do not mix new and used batteries. Do not install with incorrect polarity.
4. Do not disassemble.
5. Do not store with conductive objects.
6. Store away from flame or spark hazards.

SECTION 8 – EXPOSURE/PERSONAL PROTECTION

Respiratory Protection	None required under normal handling conditions. In case of venting, provide fresh air, ventilation, and use a self-contained breathing apparatus.
Gloves	Contact with electrolyte can cause severe skin irritation and burns. Wear gloves if cell is ruptured, corroded, or leaking materials.
Safety Glasses	Always wear safety glasses with working with battery cells.

SECTION 9 – PHYSICAL/CHEMICAL PROPERTIES

Boiling Point	N/A	Melting Point	N/A
Vapor Pressure	N/A	Vapor Density	N/A
Specific Gravity	N/A	Evaporation Rate	N/A
Solubility in Water	Insoluble	Appearance and Odor	Cylindrical or button shape, solid object, odorless

SECTION 10 – STABILITY & REACTIVITY

Reactivity in Water	N/A	Auto-ignition Temperature	N/A
Flash Point	N/A	Flammable Limits in Air, by vol.	N/A
Percent Volatile By Volume	N/A		
Stable	Avoid electrically shorting the cell. Under normal conditions this product is stable and will not decompose. Avoid heat, fire, mechanical and electrical abuse.		
Incompatibility (materials to avoid)	N/A		

SECTION 11 – TOXICOLOGICAL INFORMATION

Threshold Limit Value	N/A
Signs and Symptoms of Exposure	None. (In fire or rupture situations, refer to sections 4, 5, & 8.)
Medical Conditions Generally Caused by Exposure	Chemicals may cause burns to skin, eyes, gastrointestinal tract and mucous membranes. Inhalation of electrolyte vapors may cause irritation of the upper respiratory tract and lungs.
Routes of Entry	Skin, Eyes, Ingestion (swallowing)

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Decomposition Products	N/A
Hazardous Polymerization	Will not occur

SECTION 13 - DISPOSAL

Under normal use these batteries do not release internal ingredients into the environment.
Do not carelessly discard and keep away from rain or snow.
Do not discard batteries into a fire.
Dispose of properly or recycle in accordance with all Federal, State and local laws and regulations.

SECTION 14 – TRANSPORT

These batteries must be packaged in a way that prevents the dangerous evolution of heat and protects the terminals from short circuit. When properly packaged and labeled, these dry batteries fall under special provision of the agencies listed in Section 15.

SECTION 15 – REGULATORY INFORMATION

DOT 49 CFR172.102 Special Provision 130
ICAO/IATA Special Provision A123, UN 3028 Provisions 295 - 304
IMDG NiMH battery Sea Transportation regulation; Code: UN-3496, SP-117 & SP-963

SECTION 16 - OTHER

Document Control No:	SDS20009 – Ascent SDS for Nickel Metal Hydride (NiMH) Batteries	Revision:	1	Effective Date:	01-02-2015
-----------------------------	---	------------------	---	------------------------	------------