



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

Material Safety Data Sheet

Nickel Cadmium

The information and recommendations below are believed to be accurate at the date of preparation. Ascent Battery makes no warranty of merchantability or any other warranty, express or implied, with respect to such information and we assume no liability resulting from its use. This MSDS sheet provides guidelines for safe use and handling of the product. It does not and cannot advise all possible situations. Your specific use of this product should be evaluated to determine if additional precautions must be taken.

Distributed By:	Ascent Battery Supply, LLC	Emergency Number	INFOTRAC (800) 535-5053
Address	925 Walnut Ridge Drive Hartland, Wisconsin 53029	Overseas Emergency Number	INFOTRAC (800) 535-5053
Date Prepared	1/23/03		

SECTION 1 – IDENTITY

Product Name	Nickel Cadmium Battery
Common Synonyms	NiCd
DOT Description	Dry Battery
Chemical Name	Nickel Cadmium; Secondary Battery Battery

SECTION 2 – HAZARDOUS INGREDIENTS

Chemical Name	CAS No.	Percentage %
Cadmium	7440-43-9	11 - 26
Cadmium Hydroxide	21041-95-2	11 - 26
Nickel (Powder)	7440-02-0	8 - 17
Nickel Hydroxide	12054-48-7	5 - 12
Potassium Hydroxide	1310-58-3	< 3
Nylon	N/A	< 2
Steel	N/A	12 - 13
Other	N/A	< 1

SECTION 3 – PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point	NA	Melting Point	NA
Vapor Pressure	NA	Vapor Density	NA
Specific Gravity	NA	Percent Volatile By Volume	NA
Solubility in Water	NA	Reactivity in Water	NA
Appearance and Odor	Geo-metric, solid object	Evaporation Rate	NA
Flash Point	NA	Flammable Limits in Air % by Volume	NA
Extinguisher Media	Use Water, foam or dry powder	Auto-Ignition Temperature	NA
Special Fire Fighting Procedures	Wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products.		
Unusual Fire & Explosion	Cells may rupture when exposed to high heat resulting in release of corrosive materials.		

SECTION 4 – PHYSICAL HAZARDS

Stable or Unstable Stable **Conditions to Avoid** Electrical shorting the cell.

Incompatibility
(Materials to Avoid) NA

Hazardous
Decomposition
Products NA

Hazardous
Polymerization Will Not Occur

SECTION 5 – HEALTH HAZARDS

Threshold NA

Limit Value

Signs and Symptoms
of Exposure None (In fire or rupture situation see section 2 and section 4.)

Medical Conditions
Generally Caused by
Exposure Chemicals may cause burns to skin, eyes, gastrointestinal tract and mucous membranes. Contact with skin may cause chronic eczema or nickel itch. Electrolyte is extremely corrosive to eye tissue and may cause permanent blindness. If swallowed it may cause choking, nausea, persistent vomiting, diarrhea, abdominal pain, dizziness, faintness, unconsciousness, and possible liver and kidney injury.

Routes of Entry Skin, Eyes, Swallowing

Emergency and First
Aid Procedures for Nickel Cadmium Chemicals

1. Inhalation Get fresh air. If symptoms persist seek medical attention

2. Eyes and Skin If a cell ruptures, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

4. Ingestion Ingestion of battery chemicals can be harmful. Call The National Battery Ingestion Hotline (202-625-3333) 24 hours a day, for procedures treating ingestion of chemicals. Do not induce vomiting. Dilute by giving milk and water.

SECTION 6 – SPECIAL PROTECTION INFORMATION

Respiratory
Protection NA

Ventilation NA **Local Exhaust** NA **Mechanical**
(General) NA

Gloves Wear gloves if cell ruptures, is corroded or leaking chemicals. **Safety Glasses** Always wear safety glasses when working with batteries and cells.

Other Protective
Equipment NA

SECTION 7 – SPECIAL PRECAUTIONS – SPILL AND LEAKAGE PROCEDURES

Precautions to be
Taken when
Handling and
Storing Store in dry place. Storing unpacked cells together could result in cells shorting and heating to the point of rupturing.

Other Precautions If packaging materials are not available place masking taped on positive and negatives ends of the cells.

Steps to be Taken
if chemicals are
spilled If cells are leaking or rupture, prevent skin and eye contact and collect all released material in a plastic lined container.

Waste Disposal Cells must be recycled.

Transportation These are considered to be "Dry Batteries" and are not considered a "Hazardous Material" per U.S. DOT (Department of Transportation) regulations or "dangerous goods" per IATA (International Air Transport Association) regulations.