

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

## SAFETY DATA SHEET (SDS)

# **NICKEL CADMIUM (NICD) 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 Cadmium Battery

Common Name(s)

NiCd, NiCad, Nickel Cadmium

Synonyms Nickel Cadmium Rechargeable Battery

**DOT Description** Dry Battery

Chemical Name Nickel Cadmium Secondary Battery

**Distributed By**Ascent Battery Supply, LLC

Address 1325 Walnut Ridge Drive, Hartland, WI 53029

Emergency number CHEMTREC 1-800-424-9300

International Emergency Number CHEMTREC +1 703-741-5970 (Collect)

# SECTION 2 - HAZARD(S)

Hazard Statements				
Intact Batteries				
Eyes	Contents of an open battery can cause severe irritation and chemical burns.			
Skin	Contents of an open battery can cause skin irritation and/or chemical burns.			
Inhalation	Contents of an open battery can cause respiratory irritation.			
Ingestion	Ingestion of battery chemicals can be harmful. Seek medical attention immediately.			
Unusual Fire and Explosion Hazards	Cells may rupture when exposed to excessive heat. This could result in the release of flammable or corrosive materials.			

GHS Classification: NA
Signal Word: NA
Hazard Classification: NA

Do not short circuit, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product. Risk of fire or explosion.

Under normal conditions of use, the electrode materials and liquid electrolyte they contain are not exposed to the outside, provided the battery integrity is maintained and seals remain intact.

<u>Additional Information</u> – No health effects are expected related to normal use of this product as sold.

# **SECTION 3 - COMPOSITION**

Chemical Name	CAS No.	Percentage %
Nickel	7440-02-0	10-25%
Lead	7439-92-1	0-0.1 %
Cadmium	7440-43-9	0-28%
Hexavalent Chromium (Cr6+)	18540-29-9	0-0.1 %
Mercury	7439-97-6	0-0.1 %
Polybrominated Biphenyls (PBB's)	59536-65-1	0-0.1 %
Polybromiated Diphenyls Ethers (PBDE's)	NA	0-0.1 %
Ni(OH)2 Nickel Hydroxide	12054-48-7	0-30%
'Non-Hazardous Materials	NA	0-30%
30% KOH Solution (Potassium)	1310-58-3	0-20%
30% NaOH Solution (Sodium)	1310-73-2	0-20%
Iron	7439-89-9	10-34%
Cobalt	7440-48-4	0-1.1%
Cadmium Hydroxide	21041-95-2	11-28%
Nylon	24937-16-4	02%
Steel	12597-68-1	11-14%

# **SECTION 4 - FIRST AID MEASURES**

Inhalation	If exposed to fumes or dust; get fresh air. If symptoms persist seek medical attention.		
Eyes Contact	Flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes; get immediate medical attention.		
Skin Contact	Flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes; wash with soap and water		
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.		

# **SECTION 5 - FIRE-FIGHTING MEASURES**

Flash Point – N/A

Auto Ingestion – No Data Available

Extinguisher Media - Use CO<sub>2</sub>, foam or dry chemical extinguishers. Sand may also be used.

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

#### **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**

**Handling** – Do not disassemble. Do not short circuit. Sources of short circuits include jumbled batteries in bulk containers, metal jewelry, metal covered tables or metal belts used for assembly of batteries into devices.

**Storage** - Store batteries under roof in cool, dry, well-ventilated areas separated from incompatible materials and from activities that may create flames, spark or heat. Do not store unpacked cells together: avoid cells shorting to one another – especially in a charged state. Do not mix new and used batteries. Keep away from metallic objects that could bridge the terminals on a battery and create a dangerous short-circuit.

**Charging** – Use manufacturer's recommendations charger. Improper charging can cause damage and even high pressure rupture. Do not install with incorrect polarity.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation Requirements** – Not necessary under normal conditions.

**Respiratory Protection (NIOSH/MSHA approved)** - None required under normal handling conditions. In case of venting, provide fresh air, ventilation, and use a self-contained breathing apparatus.

**Eye Protection** – Not necessary under normal conditions.

**Skin Protection** – Not necessary under normal conditions. Wear gloves if cell is ruptured, corroded, or leaking materials.

# SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

<b>Boiling Point</b>	NA	Melting Point	NA
Vapor Pressure	NA	Vapor Density	NA
Specific Gravity (H2O=1)	NA	Solubility in Water	NA
<b>Evaporation Rate</b>	NA	рН	NA
Donativity in Mateu	NA	Auto-Ignition	NA
Reactivity in Water		Temperature	
Lower Explosive Limit	NA	Upper Explosive Limit	NA
(LEL)		(UEL)	
Odor Threshold	NA	Viscosity (poise @ 25° C)	NA
Partition Coefficient	NA	Decomposition	NA
		Temperature	
Flash Point	NA	·	•
Appearance and Odor	Cylindrical or button shape, solid object, odorless.		

### **SECTION 10 – STABILITY & REACTIVITY**

**Stability** - This product is stable under normal conditions at ambient temperature.

## INCOMPATIBILITY (MATERIALS TO AVOID) - NA

### **SECTION 11 – TOXICOLOGICAL INFORMATION**

**ROUTES AND METHODS OF ENTRY - Skin, Eyes, Ingestion (swallowing).** 

SIGNS AND SYMPTOMS OF OVEREXPOSURE – None. (In fire or rupture, refer to sections 4, 5, and 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.

### **SECTION 12 - ECOLOGICAL INFORMATION**

#### **Hazardous Decomposition Products** – NA

Hazardous Polymerization - Will not occur.

Under normal use these batteries do not release internal ingredients into the environment. Damaged or abused batteries may release small amounts of cadmium, nickel or carbon oxides. Do not carelessly discard, as small amounts of cadmium may be released into storm or surface water. Do not discard batteries into a fire. Dispose of properly or recycle.

#### SECTION 13 - DISPOSAL

**Waste Disposal Method** - 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 are not subject to dangerous goods regulation for the purpose of transportation and fall under special provision of the agencies listed in Section 15.

#### **SECTION 15 - REGULATORY INFORMATION**

**IATA** Not considered to be 'dangerous goods' when packaged properly

**DOT** Not considered to be a 'hazardous material' when packaged properly

**ICAO** Not subject when packaged properly

**IMDG** Not subject when packaged properly

UN2800 Exempt when packaged properly

### **SECTION 16 - OTHER INFORMATION**

None.

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