



MATERIAL SAFETY DATA SHEET

Product Name: Nickel Cadmium Rechargeable Battery

Issued Date: 05-March-2009

Revision Date: 15-December-2011

436 Kato Terrace, Fremont, CA 94539 U.S.A.

Tel: 510.687.0388 Fax: 510.687.0328

www.TenergyBattery.com



Tenergy Corporation

436 Kato Terrace

Fremont, CA 94539

Tel: 510.687-0388 Fax: 510.687.0328

www.TenergyBattery.com email: sales@tenergybattery.com

Section I – Information of Manufacturer

Manufacturer's Name: Tenergy Corporation

463 Kato Terrace
Fremont, CA 94539, USA

Tel: (510) 687-0388

Fax: (510) 687-0328

Date of revision: 15 Dec 2011

Section II -Hazardous Ingredients/Identity Information

Hazardous Components:

Description:	Approximate % of total weight
Battery Model:	Nickel-Cadmium Battery
Mercury:	ND
Lead:	ND
CdO (Cadmium Oxide):	22.5%
Ni(OH) ₂ (Nickel Hydroxide) :	19.8%
30% KOH Solution (Potassium Hydroxide) :	14.4%

Section III – Physical/Chemical Characteristics

Boiling Point:	N.A.
Specific Gravity (H ₂ O=1):	N.A.
Vapor Pressure (mm Hg):	N.A.
Melting Point:	N.A.
Vapor Density (AIR=1):	N.A.
Evaporation Rate (Butyl Acetate=1):	N.A.
Solubility in Water:	N.A.



Appearance and Odor:

Cylindrical Shape. Odorless

Section IV – Hazard Classification

Classification:

N.A.

Section V – Reactivity Data

Stability	Unstable	
	Stable	X

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

Hazardous Polymerization	May Occur	
	Will Not Occur	X

Section VI – Health Hazard Data

Route(s) of entry:

Inhalation:

N.A.

Skin:

N.A.

Ingestion:

N.A.

Health Hazard (Acute and Chronic) / Toxicological information:

- In ease of electrolyte leakage, skin will be itchy when contaminated with electrolyte.
- In contact with electrolyte can cause severe irritation and chemical burns.
- Inhalation of electrolyte vapors may cause irritation of the upper respiratory tract and lungs.



Section VII – First Aid Measures

First Aid Procedures:

- If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately.
- If electrolyte comes into contact with eyes, wash with copious amounts of water for fifteen (15) minutes, and contact a physician.
- If electrolytes vapors are inhaled, provide fresh air and seek the attention if respiratory irritation develops. Ventilate the contaminated area.

Section VIII – Fire and Explosion Hazard Data

Flash Point (Method Used):	N.A.
Ignition Temp:	N.A.
Flammable Limits:	N.A.
LEL:	N.A.
UEL:	N.A.
Extinguishing Media:	Carbon Dioxide, Dry Chemical or Foam Extinguishers
Special Fire Fighting Procedures:	N.A.
Unusual Fire and Explosion Hazards:	Do not dispose of battery in fire – may explode. Do not short circuit battery – may cause burns.

Section IX – Accidental Release of Spillage

Steps to be taken in case Material is Released or Spilled:

- Batteries that are leakage should be handled with rubber gloves.
- Avoid direct contact with electrolyte.
- Wear protective clothing and a positive pressure Self-Contained Breathing Apparatus (SCBA).

Section X – Handling and Storage

Safe handling and storage advice:

- Batteries should be handled and stored carefully to avoid short circuits.



- Do not store in disorderly fashion, or allow metal objects to be mixed with stored batteries.
- Never disassemble a battery.
- Do not breathe call vapors or touch internal material with bare hands.
- Keep batteries between -30 C and 35 C for prolong storage.

Section XI – Exposure Controls / Person Protection

Occupational Exposure Limits: LTEP N.A.
 STEP N.A.

Respiratory Protection (Specify Type):

Ventilation	Local Exhausts:	N.A.	Special:	N.A.
	Mechanical (General):	N.A.	Other:	N.A.
	Protective Gloves:	N.A.	Eye Protection:	N.A.

Other Protective Clothing or Equipment: N.A.

Work/Hygienic Practices: N.A.

Section XII - Ecological Information

N.A.

Section XIII - Disposal Method

Dispose of batteries according to government regulations

Section XIV - Transportation Information

Tenergy Corporation’s batteries are considered to be “Dry cell” batteries and are unregulated for purposes of transportation by the U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA) and International Maritime Dangerous Goods



Tenergy Corporation

436 Kato Terrace

Fremont, CA 94539

Tel: 510.687-0388 Fax: 510.687.0328

www.TenergyBattery.com email: sales@tenergybattery.com

Regulations (IMDG). The only DOT requirement for shipping these batteries is special provision 130 which states: Batteries, dry are not subject to the requirement of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat (For example, by the effective insulation of exposed terminals). As of 1/1/97 IATA requires that batteries being transported by air must be protected from sheet-circuiting and protected from movement that could lead to short-circuiting.

Section XV - Regulatory Information

Special requirement be according to the local regulations.

Section XVI - Other Information

The data in this Material Safety Data Sheet relates only to the specific material designated herein.

Section XVII – Measures for Fire Extinction

In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture. Fire fighters should wear self-contained breathing apparatus.