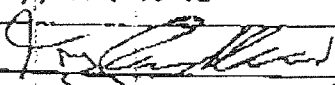


# Material Safety Data Sheet

H5447, PR5447  
 H5447-XT Nicad Battery, Sealed  
 QUICK IDENTIFIER  
 Common Name: (used on label and list)  
 10v/1.3AH

May be used to comply with OSHA's Hazard Communication Standard, 29CFR 1910.1200. Standard must be consulted for specific requirements.

## SECTION 1 -

Manufacturer's Name	Alexander Mfg. Co.	ISOM 56469
Address	1511 S. Garfield Pl., P.O. Box 1508	Emergency Telephone No. (515) 423-8955
City, State, and ZIP	Mason City, Iowa 50401	Other Information Calls (515) 423-1161
Signature of Person Responsible for Preparation (Optional)		Date Prepared 2/2/95

## SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (Optional)	CAS NO.
Nickel & Nickel Hydroxide 20-30% (Ni) 1mg/m <sup>3</sup>					
Cadmium & Cadmium Hydroxide 13-15% (Cd) 0.2mg/m <sup>3</sup>					
Potassium Hydroxide 2-4% as dry Hydroxide 2mg/m <sup>3</sup>					

NOTE: Alexander Mfg. Co. considers this battery an "article" as defined in 29 CFR 1910-1200 Section (c). Further, this article (battery) does not release or otherwise result in exposure to a hazardous chemical under the conditions of your intended use. Each cell of the battery is a sealed container enclosing a nickel electrode, a cadmium electrode & potassium hydroxide electrolyte.

## SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Belling Point	No info available	Specific Gravity (20°C/15°C)	No info available	Vapor Pressure (mm)	No info available
Solubility in Water	N/A	Reactivity in Water	Battery may short circuit in water.		
Appearance and Odor	N/A	Melting Point	No info available		

## SECTION 4 - FIRE & EXPLOSION DATA

Flash Point	No info available	Method Used	Flammable Limits in Air % by Volume	LSL	UEL
Auto-Ignition Temperature	No info available	Extinguisher Media	No info available		
Special Fire Fighting Procedures	Wear self-contained breathing apparatus if large quantities of batteries are on fire. Warehouse or depot type storage.				
Unusual Fire and Explosion Hazards	Cadmium fumes may be released during burning.				

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability Unstable Stable Conditions to Avoid Burning (fire), rupturing.

Incompatibility (Materials to Avoid) No info available.

Hazardous Decomposition Products Cadmium fumes may be released during a fire.

Hazardous Polymerization May Occur Will Not Occur Conditions to Avoid

SECTION 6 - HEALTH HAZARDS

1 Acute N/A 2 Chronic N/A See section 2.

Signs and Symptoms of Exposure NOTE: Under normal use, H5447-XT battery does not release toxic material.

Medical Conditions Generally Aggravated by Exposure N/A

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes No IARC Monographs Yes No OSHA Yes No

Emergency and First Aid Procedures See section 4.

Table with 2 columns: ROUTES OF ENTRY (Inhalation, Eyes, Skin, Ingestion) and description of hazards during fire or rupture.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage No not incinerate or mutilate; may burst releasing toxic material. (Cadmium fumes).

Other Precautions Do not short circuit the battery, it may cause burns when in contact with the skin or eyes.

Steps to be Taken in Case Material is Released or Spilled Electrolyte, Potassium Hydroxide is caustic. Do not allow skin or eye contact. Flush with water. There is only a trace amount of Potassium Hydroxide available in the battery.

Waste Disposal Methods (Consult federal, state, and local regulations) DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Table with 6 columns: Respiratory Protection, Ventilation, Protective Gloves, Other Protective Clothing or Equipment, Work/Hygienic Practices, Mechanical (General), Special, Other.

IMPORTANT Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.