

Alkaline Rechargeable AA-AAA-C-D

Flammability - 0 Reactivity - 0
Health - 0 Protection - A

MATERIAL SAFETY DATA SHEET

PRODUCT INFORMATION

Product: Alkaline Rechargeable AA-AAA-C-D Battery
Trade Name: Pure Energy Alkaline Rechargeable AA-AAA-C-D Battery
Chemical Name: N/A
Synonyms: N/A
Chemical Family: N/A
Formula: N/A
Manufacturers Name: Pure Energy Visions Incorporated
Manufacturer's Address: Amherst, Nova Scotia, B4H 4J6
Emergency Telephone No.: (902) 667 4100
TDG/DOT Description: Dry Battery
Product Use: Various
CAS #: N/A

HAZARDOUS INGREDIENTS

Important: In general, with proper use of the battery, no hazardous chemicals are encountered. The chemicals are sealed within an enclosed system.

During **improper misuse** of a battery, the battery equipped with a safety vent will release all pressure that has built up and may release a small amount of a hazardous alkaline liquid. This liquid will be the focal point of this **Material Safety Data Sheet**.

<u>Hazardous Ingredients</u>	<u>CAS #</u>	<u>ACGIH TLV %</u>
Potassium Hydroxide:	01310-58-3	2 mg/m ³ Ceiling LD50 365 mg/kg (oral, rat) (3) LD50 273 mg/kg (oral, rat) (1)

Note:

- (1) TLV – Threshold limiting value
- (2) LD50 – lethal dose to kill 50% of subject population

PHYSICAL PROPERTIES (BATTERY)

Physical State: Battery components confined with a sealed canister.
Appearance and Odor: N/A
Odor' Threshold (PPM): N/A
Boiling Range: N/A
Vapor Pressure: N/A
Specific Gravity: N/A
Vapor Density: N/A
Bulk Density: N/A
Evaporation Rate: N/A
Solubility: N/A
% Volatile by volume: N/A
pH: N/A
Coefficient of Water/Oil Distribution: N/A

Flammability - 0 Reactivity - 0
Health - 0 Protection - A

Ingested: Corrosive, Potassium Hydroxide causes severe burning and pain in mouth, throat and abdomen. Vomiting, diarrhea, and perforation of the esophagus and stomach lining may occur.

Other Health Effects:

Corrosive effects on the skin and eyes may be delayed, and damage may occur without the sensation or onset of pain. Potassium Hydroxide eye burns often go through three stages, an acute stage when early damage is experienced. A reparation stage when the eye begins to treat and a stage of late complications when a relapse may occur with more severe damage.

FIRST AID TREATMENTS

Inhaled: Move victim to fresh air. Give artificial respiration only if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing and no pulse. Obtain medical attention immediately,

Skin Contact: Flush skin with running water for a minimum of 20 minutes. Remove contaminated clothing. Obtain medical attention immediately.

Eye Contact: Flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention immediately.

Ingested: Do not attempt to give anything by mouth to an unconscious person. If person is alert and not convulsing, rinse mouth out and give a glass of water to dilute material. Do not induce vomiting. Immediately contact local poison control center. Obtain medical attention immediately.

HANDLING PROCEDURES AND EQUIPMENT

No special precautions are required for proper general use of the battery. Follow closely the directions provided on the battery packaging. Charge Rechargeable Alkaline Batteries only in a battery charger designed specifically for Rechargeable Alkaline batteries. See back of charger for details. Placing these batteries in any other charging device may cause the batteries to burst and leak.

Storage Requirements: Store in a dry, cool, well-ventilated area between 5°C and 28°C at 0% to 60% Relative Humidity. Elevated temperatures can result in shortened battery life. Storing unpackaged cells together could result in cell shorting and heat build-up.

TRANSPORTATION INFORMATION

Pure Energy Visions Incorporated batteries are considered to be “dry cell” batteries and are unregulated for purposes of transportation by the Department of Transportation (DOT), the international Civil Aviation Organization (ICAO), International Air Transport Association (IATA) and the International Maritime Organization (IMO). The only DOT requirement for shipping alkaline batteries is Special Provision 130 that states: “Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat (for example the effective insulation of exposed terminals)”. The only requirements for shipping these batteries by ICAO and IATA are Special provision A123. Which states: “An electrical battery or battery powered device having the potential of dangerous evolutions of heat that is not prepared so as to prevent a short-circuit. (E.g. in the case of batteries, by the effective insulation of exposed terminals; or in the case of equipment, by disconnection of the battery and protection of exposed terminals) is forbidden from transportation.” (IMDG) The International Maritime Dangerous Goods Code regulates them for ocean transportation under Special Provision 304 which states. “Batteries, dry, containing corrosive electrolyte which will not flow out of the battery if the battery case is cracked is not subject to the provisions of this Code provided the batteries are securely packed and protected against short-circuiting”. Examples of such batteries are Alkali-manganese, Zinc-carbon, and Nickel metal hydride and Nickel-cadmium batteries.

