

# B001 Alkaline Battery Pack

PRODUCT NAME : Pulsarlube Alkaline Battery Pack      Type No.: B001      Volts : DC 4.5V  
 TRADE NAMES : Alkaline Battery Pack      Approximate Weight : 84.5g  
 CHEMICAL SYSTEM : Alkaline-Manganese Dioxide      Designed for Recharge : No

## 1. MANUFACTURER INFORMATION

Pulsarlube USA, Inc.      Telephone Number for Information:  
 1480 Howard Street,      Tel.: +1 (847) 593-5300  
 Elk Grove Village,      Fax : +1 (847) 593-5303  
 IL 60007, USA

Emergency telephone number +1 (847) 593-5300

## 2. HAZARDS IDENTIFICATION

**CAUTION** : Batteries may explode or leak, and cause burn injury, if recharged, disposed of in fire, mixed with a different battery type, inserted backwards or disassembled. Replace all used batteries at the same time. Do not carry batteries loose in your pocket or purse. Do not remove the battery label. Keep small batteries (i.e., AAA) away from children. If swallowed, consult a physician at once. For information on treatment, call (202) 625-3333 collect.

## 3. INGREDIENTS

**IMPORTANT NOTE** : The chemicals and metals in this product are contained in a sealed can & housing. Exposure to the contents will not occur unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused. Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200. and/or WHMIS under the HPA:

(Based on the battery)

Chemical Name	CAS No.	Composition Range	LD50/LC50	Exposure Limits
Manganese Dioxide	1313-13-9	35-40%	LD50 oral rat>3478 mg/kg	5 mg/m3 Ceiling OSHA PEL 0.2 mg/m3 TWA ACGIH TLV
Zinc	7440-66-6	10-25%		None established for zinc metal
Potassium Hydroxide	1310-58-3	5-10%	LD50 oral rat 273 mg/kg	2 mg/m3 Ceiling ACGIH TLV
Graphite (natural or synthetic)	7782-42-5; 7440-44-0	1-5%		Natural: 15 mppcf TWA OSHA PEL 2 mg/m3 TWA (respirable dust) ACGIH TLV; Synthetic: 5 mg/m3 TWA (respirable dust), 15 mg/m3 TWA (total dust) OSHA PEL 2 mg/m3

## 4. FIRST AID MEASURES

**Ingestion** : Do not induce vomiting. Seek medical attention immediately. CALL NATIONAL BATTERY INGESTION HOTLINE at (202)-625-3333 collect, day or night.

**Inhalation** : Move to fresh air. If irritation persists, seek medical attention.

**Skin Contact** : Remove contaminated clothing and wash skin with soap and water. If irritation persists, seek medical attention.

## PSDS (Product Safety Data Sheet)

**Eye Contact** : Immediately flush eyes thoroughly with water for at least 15 minutes. Seek medical attention if irritation persists.

**Note** : Damaged battery will release concentrated potassium hydroxide, which is caustic.

### 5. FIRE FIGHTING MEASURES

**Hazardous Combustion Products** : Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas, caustic vapors of potassium hydroxide and other toxic by-products.

**Extinguishing Media** : Use any extinguishing media that is appropriate for the surrounding area.

**Protection of Firefighters** : Specific Hazards Arising from the Material : Batteries may burst and release hazardous decomposition products when exposed to a fire situation.

**Protective Equipment and Precautions for Firefighters** : Firefighters should wear positive pressure selfcontained breathing apparatus and full protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Clean-up personnel should wear appropriate clothing to avoid eye and skin contact and inhalation of vapors and fumes. Ventilate area. Carefully collect batteries and place in an appropriate container for disposal.

### 7. HANDLING AND STORAGE

**Precautions To Be Taken in Handling** : Avoid mechanical or electrical abuse. DO NOT short circuit or install incorrectly. Batteries may rupture or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries in accordance with equipment instructions.

**Precautions To Be Taken in Storage** : Store batteries in a dry place at normal room temperature. Do not refrigerate – this will not make them last longer.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

**Respiratory Protection** : Not necessary under normal conditions.

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

**Gloves** : Not necessary under normal conditions.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

(Based on the battery)

Boiling Point @ 760 mm Hg (°C)	Not applicable for an Article
Vapor Pressure (mm Hg @ 25°C)	Not applicable for an Article
Vapor Density (Air = 1)	Not applicable for an Article
Density (g/cm <sup>3</sup> )	2.5~3.0
Percent Volatile by Volume (%)	Not applicable for an Article
Evaporation Rate (Butyl Acetate = 1)	Not applicable for an Article
Physical State	Solid
Solubility in Water (% by weight)	Not applicable for an Article
pH	Not applicable for an Article
Appearance and Odor	Solid object / no odor

**PSDS (Product Safety Data Sheet)****10. STABILITY AND REACTIVITY**

Finished consumer product – stable under normal conditions of use. Contents are incompatible with strong oxidizing agents. Do not heat, crush, disassemble, short circuit or recharge.

**11. TOXICOLOGICAL INFORMATION**

This battery product is a finished consumer product. It is classified as an “article” and exempt under the federal OSHA Hazard Communication standard.

**Chronic Effects** : No chronic health effects reported.

**Target Organs** : No target organs reported.

**Carcinogenicity** : This finished consumer product is not carcinogenic.

**12. ECOLOGICAL INFORMATION**

No eco-toxicity data are available. This product is not expected to present an environmental hazard. alkaline battery packs do not contain any added mercury, cadmium or lead.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method** : Dispose of in compliance with federal, state/provincial and local regulations.

Non-Household Setting (US Federal): Alkaline batteries covered by this PSDS, in their original form (finished consumer product), when disposed of as waste, are considered **non-hazardous** waste according to Federal RCRA regulation (40 CFR 261).

Non-Household Setting (California) : None

Household Use : Alkaline batteries can be safely disposed of with normal household. Do not accumulate large quantities used batteries for disposal as accumulation could cause batteries to short-circuit. Do not incinerate. In countries, such as Canada, where there are regulations for the collection and recycling of batteries, consumers should dispose of their used batteries into the collection network at municipal depots, retailers. They should not dispose of them with household waste.

**14. TRANSPORT INFORMATION**

**Alkaline batteries (sometimes referred to as “Dry cell” or “household” batteries) are not listed or regulated as dangerous goods under the IATA Dangerous Goods Regulations, ICAO Technical Instructions, IMDG Code, UN Model Regulations or U.S. hazardous regulations (49CFR).**

However, special regulatory provisions apply that require batteries to be packaged in a manner that prevents the generation of a dangerous quantity of heat and short circuits. Product shipped in its original unopened Pulsarlube packaging is compliant with the following packaging special provisions:

**Ground Transport (US DOT)** : 49 CFR172.102 Special Provision 130

**Air Transport (IATA)/ICAO** : Special Provision A123 (56<sup>th</sup> Edition – 2015)

The words ‘NOT RESTRICTED’ and the ‘Special Provision A123’ must be included on the description of the substance on the Air Waybill, when air waybill is issued.

**Sea -Marine/Water Transport (IMDG)** : NONE (Not Applicable - No Requirements)

**15. REGULATORY INFORMATION**

**United States :**

**OSHA** : The finished alkaline battery product is considered an article and not covered by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

**CPSIA 2008** : Alkaline batteries are exempt. See CPSC Exemption Letter posted on P&G web site.

**EPA Mercury Containing and Rechargeable Battery Management Act of 1996** : Compliant

**EPA TSCA** : All intentionally-added components of this product are listed on the US TSCA Inventory.

**EPA SARA 313/302/304/311/312 chemicals** : Manganese compounds 35-40%; Zinc 10-25% California: This product has been evaluated and does not require warning labeling under California Proposition 65.

**State Right-to-Know and CERCLA** : The following ingredients present in the finished product are listed on state right-to-know lists or state worker exposure lists:

**PSDS (Product Safety Data Sheet)**

(Based on the battery)

Ingredient	CAS #	Level	CERCLA RQ	State				
				IL	MA	NJ	PA	RI
Manganese Dioxide	1313-13-9	35-40%	None	Y	Y	N	Y	Y
Zinc	7440-66-6	10-25%	1000 lbs	Y	Y	Y	Y	N
Potassium Hydroxide	1310-58-3	5-10%	1000 lbs	Y	Y	Y	Y	Y
Graphite (natural or synthetic)	7782-42-5; 7440-44-0	1-5%	None	Y	Y	N	Y	Y

**Canada :**

All ingredients are CEPA approved for import to Canada . This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the Controlled Products Regulations.

**16. OTHER INFORMATION**

1) Source of the data

(1) Battery manufacturer's information : PSDS(PRODUCT SAFETY DATA SHEET) Data

2) The first creation date : 2015.01.07

3) The number of times, and the final revision date : Revision times 0

The final revision date: 2015.01.07

*Pulsarlube has prepared copyrighted Product Safety Datasheets to provide information on the different Pulsarlube battery systems. As defined in OSHA Hazard Communication Standard, Section 1910.1200 (c), Pulsarlube Lithium battery Packs are manufactured articles, which do not result in exposure to a hazardous chemical under normal conditions of use. The information and recommendations set forth herein are made in good faith, for information only, and are believed to be accurate as of the date of preparation. However, Pulsarlube USA, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.*