

# 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

This Article Information Sheet (AIS) provides relevant battery information to retailers, consumers, OEMs and others users requesting a GHS-compliant SDS. Articles, such as batteries, are exempt from GHS SDS classification criteria. The GHS criteria is not designed or intended to be used to classify the physical, health and environmental hazards of an article. Branded consumer batteries are defined as electro-technical devices. The design, safety, manufacture, and qualification of branded consumer batteries follow ANSI and IEC battery standards. This document is based on principles set forth in the following hazard communication approaches: ANSI Z-400.1, GHS, JAMP AIS, IEC 62474, and ANSI C18.4M.

## 1. Document information

Document Name	B001 Alkaline Battery Pack
Document ID	PABP – B001
Issue Date	16-Apr-2010
Version	4
Last Revision	30-4-2024

## 2. Company information

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

## 3. Article information

Description	Pulsarlube Alkaline Battery Pack (Use Duracell Battery)
USE	Single Point Lubricator
Principles of Operation	A battery powers a device by converting stored chemical energy into electrical energy

## 4. Article Construction

Applicable Battery Industry Standards	ANSI C18.1M Part 1, ANSI C18.1M Part 2, ANSI C18.4M, IEC 60086-1, IEC 60086-2, IEC 60086-5
Electro-technical System	Alkaline Manganese Dioxide
Electrode - Negative	Zinc (CAS # 7440-66-6); 10-25%
Electrode - Positive	Manganese Dioxide (CAS # 1313-13-9); 35-40%; Nickel Compounds, Proprietary; 0-6%
Electrolyte	Alkali Metal Hydroxide (aqueous potassium hydroxide - CAS # 1310-58-3); 5-10%
CAN - NA/Europe/China	Nickel Cobalt Plated Steel or Nickel Plated Steel (CAS # 7440-02-0); 8-15%
Other Non-Active Materials	10-15%
Declarable Substances (IEC 62474 Criteria 1)	None

## PSDS (Product Safety Data Sheet)

Mercury Free Battery  
(ANSI C18.4M <5ppm)                      Yes

### 6. . Health & Safety

Ingestion/Small Parts Warning	Required for Small Cell or Battery (Sizes: AAA and Specialty Cells): Keep away from children. If swallowed, consult a physician immediately.
Normal Conditions of Use	Exposure to contents inside the sealed battery will not occur unless the battery leaks, is exposed to high temperatures, or is mechanically abused.
Note to Physician	A damaged battery will release concentrated and caustic potassium hydroxide. Do not induce vomiting. Seek medical attention immediately. For information on treatment, call the National Battery Ingestion Hotline (telephone numbers for the USA and Canada are provided below).
First Aid - If swallowed	
Poison Center/North America	USA/Canada Calls Only: 1-800-498-8666 (Toll Free) [ 24-Hour National Battery Ingestion Hotline]
First Aid - Eye Contact	Flush with water for at least 15 minutes. Seek medical care if irritation persists.
First Aid - Skin Contact	Remove contaminated clothing. Wash skin with soap and water. Seek medical care if irritation persists
First Aid - Inhalation	Remove to fresh air
Battery Safety Standards & Testing	Alkaline batteries meet the requirements of ANSI C18. 1M Part 2 and IEC 60086-5. These standards specify tests and requirements for alkaline batteries to ensure safe operation under normal use and reasonably foreseeable misuse. The test regimes assess three conditions of safety. These are: 1-Intended use simulation: Partial use, vibration, thermal shock, and mechanical shock 2-Reasonably foreseeable misuse: Incorrect installation, external short-circuit, free fall (userdrop), over-discharge, and crush 3-Design consideration: Thermal abuse, mold stress
Precautionary Statements	<b>CAUTION:</b> 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.

### 6. Fire Hazard & Firefighting

Fire Hazard	Batteries may rupture or leak if involved in a fire
Extinguishing Media	Use any extinguishing media appropriate for the surrounding area
Fires Involving Large Quantities of Batteries	Large quantities of batteries involved in a fire will rupture and release caustic potassium hydroxide. Firefighters should wear self-contained breathing apparatus and protective clothing

### 7. Handling & Storage

Handling Precautions	Avoid mechanical and 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.
Storage Precautions	Store batteries in a dry place at normal room temperature. Refrigeration does not make them last longer.
Spills of Large Quantities of Loose Batteries (unpackaged)	Notify spill personnel of large spills. Irritating and flammable vapors may be released from leaking or ruptured batteries. Spread batteries apart to stop shorting. Eliminate all ignition sources. Evacuate area and allow vapors to dissipate. Clean-up personnel should wear appropriate PPE to avoid eye and skin contact and inhalation of vapors or fumes. Increase ventilation. Carefully collect batteries and place in appropriate container for disposal. Remove any spilled liquid with absorbent material and contain for disposal.

## PSDS (Product Safety Data Sheet)

### 8. Disposal Considerations (GHS Section 13)


Collection & Proper Disposal	Dispose of used (or excess) batteries in compliance with federal, state/provincial and local regulations. Do not accumulate large quantities of used batteries for disposal as accumulations could cause batteries to short-circuit. Do not incinerate. In countries, such as Canada and the EU, 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 and retailers.
USA EPA RCRA (40 CFR 261)	Classified as non-hazardous waste (not ignitable, corrosive, reactive or toxic). Federal Universal Waste Regulations (40 CFR 273) do not apply. State requirements may be more stringent than Federal.
California Universal Waste Rule (Cal. Code Regs. Title 22, Div. 4.5, Ch. 23)	California prohibits disposal of batteries as trash (including household trash).
Vermont Primary Battery Stewardship Law (ACT 139)	In Vermont, consumers must recycle alkaline batteries. For information, contact <a href="http://www.call2recycle.org">http://www.call2recycle.org</a> .

### 9. Transport Information (GHS Section 14)

Regulatory Status	Not regulated by IMO IMDG/Not classified by IMO IMDG/the substance is not subject to IMO IMDG. Alkaline batteries (sometimes referred to as "Dry Cell" or "household" batteries) are not listed or regulated as dangerous goods under IATA Dangerous Goods Regulations, ICAO Technical Instructions, IMDG Code, UN Model Regulations, U.S. Hazardous Materials Regulations (49 CFR), and UNECE ADR.
UN Identification Number/ Shipping Name Special Provision (SP) Conformance	None - Not Required  Special regulatory provisions require batteries to be packaged in a manner that prevents the generation of a dangerous quantity of heat and short circuits. Shippers can prepare batteries by taping the terminals, individually packaging batteries, or otherwise segregating the batteries to prevent risk of creating a short circuit. Batteries shipped in original unopened Duracell packaging is compliant
US DOT SP Air Transport IATA 64th Edition, ICAO	49 CFR 172.102 Special Provision 130 Special Provision A123 NOTE: The words "NOT RESTRICTED" and "SPECIAL PROVISION A123" must be included on the description of the substance on the Air Waybill, when air way-bill is issued.
Passenger Air Travel Vessel Travel (IMDG/IMO)	No restrictions Not regulated by IMO IMDG/Not classified by IMO IMDG/the substance is not subject to IMO IMDG.
Emergency Transportation Hotline	CHEMTREC 24-Hour Emergency Response Hotline Within the United States call +1 (847) 593-5300

### 10. Regulatory Information (GHS Section 15)

#### 10a. Battery Requirements

USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996	During the manufacturing process, no mercury is added.
EU Battery Directive 2006/66/EC & amendment 2013/56/EU	Compliant with marking and substance restrictions for mercury (<0.0005%); cadmium (<0.0020%) and lead (<0.0040%). Global labels are marked with the special collection symbol and the EU qualifier in accordance with EU Battery Directive 2006/66/EC, Article 11, Paragraph 1 on batteries and accumulators and waste batteries and accumulators (Annex II).
P.R.C. Provision on Mercury Content Limitation for Batteries (GB 8897.5- 2013, MOD, Section 9.1(e))	

## PSDS (Product Safety Data Sheet)

P.R.C. Mercury Free Battery  
(GB 24427-2021) < 1ppm      Yes

### 10b. General Requirements

USA CPSIA 2008 (PL. 11900314)	Exempt
USA CPSC FHSA (16 CFR 1500)	Consumer batteries are not listed as a hazardous product
USA EPA TSCA Section 13 (40 CFR 707.20)	For customs clearance purpose, batteries are defined as an "Article"
USA EPA RCRA (40 CFR 261)	Classified as non-hazardous waste (not ignitable, corrosive, reactive or toxic). Federal Universal Waste Regulations (40 CFR 273) do not apply. State requirements may be more stringent than Federal.
California Prop 65	No warning required per 3rd party assessment.
CANADA Products Containing Mercury Regulations SOR/20140254	Mercury free
EU REACH REGULATION (EC) NO. 1907/2006 and REACH SVHC	Regulated as an "article." No listed SVHC substances are present (>0.1% w/w) in accordance with ECJ article definition of 10 September 2015. This SVHC communication is based on the best available information to us. Duracell is managing compliance with EU REACH as part of our daily quality, safety, and regulatory activities. The Candidate List of SVHC's is updated approximately bi-annually and Duracell will update this declaration accordingly if the updated SHVC list affects the assessment herein.
EU REACH Article 31	SDS is not required for consumer alkaline batteries.

### 10c. Regulatory Definitions - Articles

USA OSHA	29 CFR 1910.1200(b)(6)(v)
USA TSCA	40 CFR 704.3; 710.2(3)(c); and [19 CFR 12.1209a]
EU REACH	Title 1 - Chapter 2 - Article 3(3)
GHS	Section 1.3.2.1

## 11. Other Information

### 11a. Certification & 3<sup>rd</sup> Party Approvals

Note:	UL Listing applies to all 9V and only AA manufactured in LaGrange USA and China
UL (UTGT2.S50939 Single Multiple Station Smoke Alarms - Component)	AA, 9V Certification Standard: ANSI/UL 217 Single & Multiple Station Smoke Alarms

### 11b. AIS Hazard Communication Approaches (consulted in developing this document):

Globally Harmonized System (GHS)	GHS SDS requirements and classification criteria do not apply to articles or products (such as batteries) that have a fixed shape, which are not intended to release a chemical. The article exemption is found in Section 1.3.2.1.1 of the GHS and reads: The GHS applies to pure substances and their dilute solutions and to mixtures. "Articles" as defined by the Hazard Communication Standard (29 CFR 1900.1200) of the OSHA of the USA, or by similar definition, are outside the scope of the system."
Joint Article Management Promotion Consortium JAMP	JAMP is a Japanese Industry Association who developed the concept of an Article Information Sheet as a supply chain tool to share and communicate chemical information in articles. The AIS authoring process is based on "declarable" substances to meet global regulatory requirements as well as substances to be reported by GADSL, JIG, etc.
IEC 62474 Ed. 1.0 B:2012 Material Declaration for Products of and for the Electro-technical Industry	An international standard that came into effect in March 2012 concerning declaration for electrical and electronic products. IEC 6274 replaces the defunct Joint Industry Guide – Material Declaration for Electro-technical Products (JIG-101-Ed 4.1 (May 21, 2012)

## PSDS (Product Safety Data Sheet)

IEC 62474 Database –  
Publicly available online  
(maintained by TC11:  
Environmental Standardization  
for electrical and electronic  
products and systems.  
ANSI C18.4M-2017 Portable  
Cells and Batteries -  
Environmental  
ANSI Z 400.1/Z19.1 (2010)

The general principle for a substance to be included in the database as a declarable substance is: 1) existing national laws or regulations in an IEC member country that are relevant to Electro-technical products and that prohibit or restrict substances, or that have a labeling, communication, reporting or notification requirement, and 2) applying IEC 62474 criteria results in identification of declarable substance.

This standard provides regulatory guidance and a template to author an article information sheet for a portable consumer battery. See Annex (informative) C.2 Safety Data Sheets and Annex E (Informative) E. 2 General.

2.1 Scope: Applies to preparation of SDSs for hazardous chemicals used under occupational conditions. Does not address how the standard may be applied to articles. It presents basic information on how to develop and write a SDS. Additional information is provided to help comply with state and federal environmental and safety laws and regulations. Elements of the standard may be acceptable for International use

## 16. OTHER INFORMATION

1) Source of the data

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

2) The first creation date : 2010.04.16

3) The number of times, and the final revision date : Revision times 5

The final revision date: 2025.04.08

*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, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.*