Safety Data Sheet

MEDCELL ALKALINE BATTERIES 1.5V C

Section 1. Identification

Product Identifier	MEDCELL ALKALINE BATTERIES 1.5V C
Synonyms	MPHBC; MSD_SDS0298
Manufacturer Stock Numbers	MPHBC
Recommended use	N/A
Uses advised against	N/A

Manufacturer Contact Address

Medline Industries, Inc.
3 Lakes Drive
Northfield, IL, 60093
USA

Phone	Emergency Phone	Fax
(800) 633-5463	(800) 424-9300 CHEMTREC	(847) 643-4436

Website
www.Medline.com

Section 2. Hazards Identification

Classification	No OSHA Hazard Classifications Applicable - Category N.A.
Signal Word	
Pictogram	
Hazard Statements	No OSHA Hazard Classifications Applicable
Precautionary Statements	
Response	N/A
Prevention	N/A
Storage	N/A
Disposal	N/A
Ingredients of unknown toxicity	0%

Hazards not otherwise classified:	N.D.
General Advice:	The common known rules for handling of chemicals should be obeyed. These chemicals are contained in a sealed steel can. For consumer use, adequate hazard warnings are printed on both the package and the battery. Potential for exposure should not exist unless the battery leaks, is exposed to high temperatures or is mechanically or electrically abused. Concentrated potassium hydroxide contained is caustic. Anticipated potential leakage of potassium hydroxide is 2-20 ml, depending on battery size. Do not eat and drink batteries. Keep batteries away from small children.
Physical-Chemical Hazards:	This preparation is not classified as dangerous according to the criteria of directive 99/45/EEC.
Hazards to Man:	If battery leaking, exposure to caustic ingredients may occur. Therefore, may cause sensitization by skin contact.
Hazards to Environment:	N.A.

Section 3. Ingredients

Chemical Nature: Alkaline zinc-manganese dioxide batteries

CAS	Ingredient Name	Weight %
7439-97-6	Mercury	< 0.0001 %
7440-38-2	Arsenic	< 0.0001 %
7440-43-9	Cadmium	< 0.0003 %
7439-92-1	Lead	< 0.0030 %
7440-02-0	Nickel	0.2 %
None	Fiber	0.6 %
12597-71-6	Brass	1.2 %
None	Nylon-66	1.6 %
7732-18-5	Water	11.0 %
7440-66-6	Zinc	16.0 %
7439-89-6	Iron	18.6 %
7782-42-5	Graphite	3.2 %
1313-13-9	Manganese oxide (MnO2)	40.6 %
1310-58-3	Potassium hydroxide	7.0 %

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

Eye Contact	If a battery is leaking and materials contact eyes, flush immediately with running water for at least 15 minutes. Consult an ophthalmologist at once.
Skin Contact:	If exposed to a leaking battery, remove contaminated clothing. Wash exposed areas with plety of water and soap. If irritation occurs, consult a physician.
Inhalation:	In case of excessive inhalation due to leaking batteries remove to fresh air. Obtain medical advice.
Ingestion	Not anticipated due to size of batteries. Choking may occur with the smaller size batteries. If exposed to a leaking battery, rinse mouth and surrounding areas with running water for at least 15 minutes. Give plenty of water to drink. Do not induce vomiting. Obtain medical advice.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	In case of fire, use Foam, Dry chemical powder, Carbon dioxide (CO2).
Unsuitable Extinguishing Media	Never use a direct water jet. In case of fire, carbon dioxide, carbon monoxide, and other toxic organic substances will be generated. Do not inhale fumes and smoke. Wear full protective clothing. Use self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions:	Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Avoid eye or skin contact and inhalation of vapours. Increase the ventilation. Wear protective clothing. Keep unprotected persons away.
Environmental Precautions:	Avoid discharge and penetration into sewerage systems, waterways, pits, and cellars.
Methods for cleaning up:	Collect spilled material with an inert standard absorbent like sand or silica. Care for well-ventilated conditions. Recycle or dispose of the materials in an appropriate way.

Section 7. Handling and Storage

General Handling:	Obey the common known rules and precautions for handling with chemicals. Avoid mechanical and electrical abuse. Do not short battery or install incorrectly. Batteries may explode, pyrolize or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries according to equipment instructions. Do not mix battery systems, such as alkaline and zinc-carbon. Replace all batteries in equipment at the same time. Do not carry batteries loose in pocket or bag. Do not remove battery labels.
Storage:	Store product in well-filled, appropriate coated and tightly closed containers avoiding influence of oxygen/air, light and humidity. Store at room temperature.

Section 8. Exposure Controls/Personal Protection

	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Occupational Exposure Limits				
	Mercury	N/A	N/A	N/A
	Arsenic	N/A	N/A	N/A
	Cadmium	N/A	N/A	N/A
	Lead	N/A	N/A	N/A
	Nickel	N/A	N/A	N/A
	Fiber	N/A	N/A	N/A
	Brass	N/A	N/A	N/A
	Nylon-66	N/A	N/A	N/A
	Water	N/A	N/A	N/A
	Zinc	N/A	N/A	N/A
	Iron	0	N/A	N/A
	Graphite	N/A	N/A	N/A
	Manganese oxide (MnO2)	N/A	N/A	N/A
	Potassium hydroxide	0	N/A	N/A

Personal Protective Equipment	N/A
Exposition/Technical measures:	Atmospheric vapour concentrations must be minimized by adequate ventilation.
Protection of eyes, hands, and skin:	None required under normal use conditions. When handling leaking batteries, use neoprene, rubber, or nitrile gloves and wear safety glasses to protect hands, eyes and skin.
General Safety and Hygiene Measures:	Use only as directed.

Section 9. Physical and Chemical Properties

Physical State	Stainless steel top battery
Color	Contents dark and gray in colour
Odor	N.A.
Odor Threshold	N.D.
Solubility	N.A.
Partition coefficient Water/n-octanol	Not available
VOC%	N/A
Viscosity	Not available
Specific Gravity	N.A.
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	N.A.
FP Method	N.D.
Ph	Not available
Melting Point	N.A.
Boiling Point	N.A.
Boiling Range	N.D.
LEL	N/A
UEL	N/A
Evaporation Rate	N.D.
Flammability	N.D.
Decomposition Temperature	N.D.
Auto-ignition Temperature	N.D.
Vapor Pressure	Not available
Vapor Density	N.D.

Explosion Limits:	No data available.
Ignition Temperature:	No data available.

Section 10. Stability and Reactivity

Thermal decomposition:	Batteries may burst and release hazardous decomposition products when exposed to fire.
Substances to Avoid:	Strong oxidation agents.
Hazardous Reactions:	Contents incompatible with strong oxidizing agents.
Hazardous Decomposition or Byproducts:	Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas; caustic vapors of potassium hydroxide and other toxic by-products.

Section 11. Toxicological Information

Toxicity information is available on the battery ingredients noted in section 2, but in general, N.A. to intact batteries.

Section 12. Ecological Information

No data availale.

Section 13. Disposal

Disposal Considerations:	Product: Dispose in accordance with appropriate regulations. If in doubt, contact your local government office concerned for information. Do not incinerate, since batteries may explode at excessive temperatures.

Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	Not Regulated
DOT Classification	Not Regulated
Packing Group	Not Regulated
AIR (ICAO/IATA):	IATA DGR (56th): Special Provision A123: "Examples of such batteries are: alkali-manganese, zinc-carbon, nickel-metal hydride and nickel-cadmium batteries. Any electrical battery... having the potential of a dangerous evolution of heat must be prepared for transport as to prevent (a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals...) is forbidden from transport; and (b) accidental activation. The words "Not Restricted" and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued."
SEA (IMDG):	IMDG CODE: Special Provision 304 which says: "Batteries, dry, containing corrosive electrolyte which will not flow out of the battery if the battery case is cracked are not subject to the provisions of this Code provided the batteries are securely packed and protected against short-circuits. Examples of such batteries are: alkaline-manganese, zinc-carbon, nickel metal hydride and nickel-cadmium batteries". These batteries are not regulated by international agencies as hazardous materials or dangerous goods when shipped. A shipping name of "Alkaline Batteries - Non-hazardous" may be used on all domestic and international bills of landing. In general, all batteries in all forms of transportation (ground, air, or ocean) must be packaged in a safe and responsible manner that prevents short circuits and be contained in "stong outer packaging" that prevents spillage of contents. All original packaging for alkaline batteries has been designated to be compliant with these regulatory concerns.

Section 15. Regulatory Information

SARA 311/312:	N.A.
SARA 302:	N.A.
SARA 313:	N.A.
TSCA:	N.A.
CERCLA Hazardous Substance List:	N.A.
Clean Air Act (CAA) Section 112, 112 (r):	N.A.
State Regulations:	N.A.

Section 16. Other Information

Revision Date	1/26/2017
Legend	N.A. - Not Applicable N.E. - Not Established N.D. - Not Determined
HMIS (U.S.A.): Health Hazard	O
HMIS (U.S.A.): Flammability	O
HMIS (U.S.A.): Reactivity	O
National Fire Protection Association (U.S.A): Health Hazard	O
National Fire Protection Association (U.S.A): Flammability	O
National Fire Protection Association (U.S.A): Instability Hazard	O
Additional Information	The information contained herein is furnished without warranty or legal responsibility of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees