

GILLETTE MEDICAL EVALUATION LABORATORIES -- DURACELL ALKALINE BATTERIES --  
6135-01-442-7275

===== Product Identification =====

Product ID:DURACELL ALKALINE BATTERIES

MSDS Date:09/01/1998

FSC:6135

NIIN:01-442-7275

Status Code:A

MSDS Number: CKDTB

=== Responsible Party ===

Company Name:GILLETTE MEDICAL EVALUATION LABORATORIES

Address:401 PROFESSIONAL DRIVE

City:GAITHERSBURG

State:MD

ZIP:20879

Count

ry:US

Info Phone Num:301-590-9781

Emergency Phone Num:302-590-9781

Resp. Party Other MSDS Num.:GMEL# 1358

CAGE:TO361

=== Contractor Identification ===

Company Name:GILLETTE MEDICAL EVALUATION LABORATORIES

Address:401 PROFESSIONAL DRIVE

Box:City:GAITHERSBURG

State:MD

ZIP:20879

Country:US

Phone:301-590-9781

CAGE:TO361

Company Name:JOINT ELECTRONICS TYPE DESIGNATION SYSTEM

Country:US

CAGE:80058

Company Name:LYNTRONICS, INC.(AMERICAN POWERCELL BATTERY CO)

Address:7 OLD DOCK RD

Box:City:YAPHANK

State

:NY  
ZIP:11980  
Country:US  
Phone:631-205-1061FX:631-205-1072  
Contract Num:SP0430-00-M-G792  
CAGE:0BSY9

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Composition/Information on Ingredients  
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Ingred Name:MANGANESE DIOXIDE  
CAS:1313-13-9  
RTECS #:OP0350000  
Minumum % Wt:35.  
Maxumum % Wt:40.  
OSHA PEL:C5 MG/M3  
ACGIH TLV:5 MG/M3

Ingred Name:ZINC  
CAS:7440-66-6  
RTECS #:ZG8600000  
Minumum % Wt:10.  
Maxumum % Wt:15.  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:POTASSIUM HYDROXIDE (35%)  
CAS:1310-58-3  
RTECS #:TT2100000  
Minumum % Wt:5.  
Maxumum % Wt:10.  
ACGIH STEL:C2 MG/M3  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:GRAPHITE, NATURAL OR SYNTHETIC (7440-44-0)  
CAS:7782-42-5  
RTECS #:MD9659600  
= Wt:15.  
OSHA PEL:SEE TABLE Z-3  
ACGIH TLV:2 MG/M3

Ingred Name:ZINC OXIDE (ZNO)  
CAS:1314-13-2  
RTECS #:ZH4810000  
&lt; Wt:1.  
OSHA PEL:15 MG/M3

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Hazards Identification  
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LD50 LC50 Mixture:NO DATA PROVIDED BY RESPONSIBLE PARTY.  
Health Hazards Acute and Chronic:INHALATION RESP

IRATORY (AND EYE)

IRRITATION MAY OCCUR IF FUMES ARE RELEASED DUE TO HEAT OR AN ABUNDANCE OF LEAKING BATTERIES. INGESTION NOT ANTICIPATED DUE TO SIZE OF BATTERIES; CHOKING MAY OCCUR WITH THE SMALLER AAA BATTERY. IRRITATION, INCLUDING CAUSTIC BURNS, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY. SKIN CONTACT IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY. ABSORPTION NOT ANTICIPATED. EYE CONTACT IRRITATION, INCLUDING

CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY.

Explanation of Carcinogenicity:NO DATA PROVIDED BY RESPONSIBLE PARTY.

Effects of Overexposure:INHALATION RESPIRATORY (AND EYE) IRRITATION MAY OCCUR IF FUMES ARE RELEASED DUE TO HEAT OR AN ABUNDANCE OF LEAKING BATTERIES. INGESTION: IRRITATION, INCLUDING CAUSTIC BURNS, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY. SKIN :CONTACT IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXP

OSURE TO A LEAKING BATTERY. ABSORPTION NOT ANTICIPATED. EYE CONTACT: IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY.

Medical Cond Aggravated by Exposure:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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===== First Aid Measures =====

First Aid:EYES:IF BATTERY LEAKS & MATERIAL CONTACTS EYES, FLUSH WITH COPIOUS AMOUNTS OF CLEAR, TEPID WATER FOR 30 MINUTES. CONTACT PHYSICIAN AT ONCE. SKIN: IF BATTERY IS LEAKING, IRRIGATE EXPOSED SKIN WITH COPIOUS AMOUNTS OF CLEAR, TEPID WATER FOR AT LEAST 15 MINUTES. IF IRRITATION, INJURY OR PAIN PERSISTS, CONSULT A PHYSICIAN. INHALATION: IF BATTERY IS LEAKING, CONTENTS MAY BE IRRITATING TO RESPIRATORY PASSAGES. REMOVE TO FRESH AIR. CONTACT PHYSICIAN IF IRRITATION PERSISTS. INGESTION: RINSE MOUTH AND SURROUNDING AREA WITH CLEAR, TEPID WATER. CONSULT WITH PHYSICIAN IMMEDIATELY.

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===== Fire Fighting Measures =====

Extinguishing Media:AS APPROPRIATE FOR SURROUNDING AREA.  
Fire Fighting Procedures:USE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.  
Unusual Fire/Explosion Hazard:BATTERIES MAY BURST AND RELEASE HAZARDOUS DECOMPOSITION PRODUCTS WHEN EXPOSED TO A FIRE SITUATION,

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===== Accidental Release Measures =====

Spill Release Procedures: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 VAPORS. INCREASE VENTILATION. CLEAN -UP PERSONNEL SHOULD WEAR APPROPRIATE PROTECTIVE GEAR.

Neutralizing Agent:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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===== Handling and Storage =====

Handling and Storage Precautions:STORE AT ROOM TEMPERATURE. AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT SHORT OR INSTALL INCORRECTLY. BATTERIES MAY EXPLODE, PYROLIZE OR VENT IF DISASSEMBLED

, CRUSHED, RECHARGED OR EXPOSED TO HIGH TEM PERATURES.

INSTALL BATTERIES IN ACCORDANCE WITH EQUIPMENT INSTRUCTIONS.

Other Precautions:DO NOT MIX BATTERY SYSTEMS, SUCH AS ALKALINE AND CARBON ZINC, IN THE SAME EQUIPMENT.REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME. DO NOT CARRY BATTERIES LOOSE IN POCKET OR BAG. DO NOT REMOVE B ATTERY TESTER OR BATTERY LABEL.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE UNDER NORMAL USE CO NDITIONS

Ventilation:GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.

Protective Gloves:USE NEOPRENE, RUBBER OR LATEX-NITRILE GLOVES WHEN HANDLING LEAKING BATTERIES.

Eye Protection:NONE UNDER NORMAL USE CONDITIONS. WEAR SAFETY GLASSES WHEN HANDLING LEAKING

Other Protective Equipment:KEEP BATTERIES AWAY FROM SMALL CHILDREN.

Work Hygienic Practices:AVOID EYE OR SKIN CONTACT AND INHALATION OF VAPOR.

Supplemental Safety and Health

P/N: 3105A/U NOTES TO PHYSICIAN: 1) THE PRIMARY ACUTELY T OXIC

INGREDIENT IS CONCENTRATED (35%) POTASSIUM HYDROXIDE. 2-ANTICIPATED POTENTIAL LEAKAGE OF POTASSIUM HYDROXIDE IS 2-20 ML, DEPENDING ON BATT ERY SIZE. THIS MSDS DOES NOT NOT ICLUDE OR ADDRESS THE SMALL BUTTON CELL BATTERIES, WHICH CAN BE DIGESTED

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===== Physical/Chemical Properties =====

HCC:Z7

Evaporation Rate & Reference:N/A (ETHER=1)

Appearance and Odor:COPPER TOP BATTERY. CONTENTS DARK IN COLOR.

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===== Stability and Reactivity

Data =====

Stability Indicator/Materials to Avoid: YES

CONTENTS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS.

Stability Condition to Avoid: DO NOT HEAT, CRUSH, DISASSEMBLE, SHORT CIRCUIT OR RECHARGE.

Hazardous Decomposition Products: THERMAL DEGRADATION MAY PRODUCE HAZARDOUS FUMES OF ZINC AND MANGANESE; HYDROGEN GAS; CAUSTIC VAPORS OF POTASSIUM HYDROXIDE AND OTHER TOXIC BY-PRODUCTS.

===== Toxicological Information =====

Toxicological Information

: THESE CHEMICALS AND METALS ARE CONTAINED IN A SEALED CAN. FOR CONSUMER USE, ADEQUATE HAZARD WARNINGS ARE INCLUDED ON BOTH THE PACKAGE AND ON THE BATTERY. POTENTIAL FOR EXPOSURE SHOULD NOT EXIST UNLESS THE BATTERY LEAKS, IS EXPOSED TO HIGH TEMPERATURES OR IS MECHANICALLY, PHYSICALLY OR ELECTRICALLY ABUSED. CONTAINS CONCENTRATED (35%) POTASSIUM HYDROXIDE, WHICH IS A CAUSTIC. ANTICIPATED POTENTIAL LEAKAGE OF POTASSIUM HYDROXIDE IS 2-20 ML, DEPENDING ON BATTERY SIZE.

A SIMILAR AMOUNT OF ZINC/ZINC OXIDE MAY ALSO LEAK.

===== Ecological Information =====

Ecological: THESE BATTERIES PASS THE US EPA'S TOXICITY CHARACTERISTIC LEACHING PROCEDURE AND THEREFORE, MAY BE DISPOSED ON WITH NORMAL WASTE.

===== Disposal Considerations =====

Waste Disposal Methods: CONSUMERS MAY DISPOSE OF SPENT/USED BATTERIES WITH HOUSEHOLD TRASH. DURACELL DOES NOT RECOMMEND THAT SPENT BATTERIES BE ACCU

MULATED (QUANTITIES OF FIVE GALLONS OR MORE SHOULD BE DISPOSED OF IN A SECURE LANDFILL) IN ACCORDANCE WITH APPROPRIATE FEDERAL, STATE & LOCAL REGULATIONS. DO NOT INCINERATE, SINCE BATTERIES MAY EXPLODE AT EXCESSIVE TEMPERATURE.

===== MSDS Transport Information =====

Transport Information: DOT HAZARD CLASS: NOT APPLICABLE. DOT SHIPPING NAME: NOT APPLICABLE. PLEASE NOTE: THESE BATTERIES ARE NOT REGULATED BY US DOT OR INTERNATIONAL AGENCIES AS HAZ

HAZARDOUS

MATERIALS OR DANGEROUS GOODS WHEN SHIPPED. DURACELL USES THE ARTICLE NAME "ALKALINE BATTERIES - NON-HAZARDOUS" ON ALL DOMESTIC AND INTERNATIONAL BILLS OF LADING.

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Regulatory Information  
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SARA Title III Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

Federal Regulatory Information:THESE BATTERIES PASS THE US EPA'S TOXICITY CHARACTERISTIC LEACHING PROCEDURE AND THEREFORE, MAY BE DISPOSED ON WITH NORMAL WASTE. ALL INGREDIENTS LISTED IN TSCA INVENTORY.

State Regulatory Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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Other Information  
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