

GILLETTE MEDICAL EVALUATION LABORATORIES -- DURACELL ALKALINE BATTERIES --  
6135-00-100-0398

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

Product ID:DURACELL ALKALINE BATTERIES

MSDS Date:05/13/1999

FSC:6135

NIIN:00-100-0398

Status Code:A

MSDS Number: CLNBV

=== 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:301-590-9781

Resp. Party Other MSDS Num.:GMEL# 1487

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:MILNUCORP INC

Address:3220-A INDUSTRIAL WAY

Box:City:SNELLVILLE

State:GA

ZIP:30039

Country:US

Phone:404-524-3181 / FAX: 770-736-5094

Contract Num:SP0400-01-A-AC75-0869

C

AGE:0RY69

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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.

Other REC Limits:0.2 MG/M3 DURACELL

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.

OSHA PEL:5 MG/M3 R DU

ST

ACGIH TLV:2 MG/M3 C

ACGIH STEL:C2 MG/M3

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:GRAPHITE, NATURAL OR GRAPHITE, SYNTHETIC (CAS 7440-44-0)

CAS:7782-42-5

RTECS #:MD9659600

Minumum % Wt:1.

Maxumum % Wt:5.

OSHA PEL:SEE TABLE Z-3

ACGIH TLV:2 MG/M3

Ingred Name:ZINC OXIDE

CAS:1314-13-2

RTECS #:ZH4810000

&lt; Wt:1.

OSHA PEL:5 MG/M3 R DUST

ACGIH TLV:10 MG/M3 DUST

Ingred Name:SOME ALKALINE BATTERIES CONTAIN A DURACELL POWER CHECK  
BATTERY ENERGY GAUGE, A NONHAZARDOUS CONDUCTIVE STRI

P LOCATED

UNDERNEATH BATTERY LABEL, THAT INDICATES AMOUNT OF CHARGE IN BATTERY.

===== Hazards Identification =====

LD50 LC50 Mixture:NOT PROVIDED BY MFR

Health Hazards Acute and Chronic:INGREDIENTS ARE CONTAINED IN A SEALED CAN. EXPOSURE SHOULD NOT EXIST UNLESS BATTERY LEAKS, IS EXPOSED TO HIGH TEMPERATURES, OR IS MECHANICALLY, PHYSICALLY, OR ELECTRICALLY ABUSED. INHALATION: RESPIRATORY (AND EYE) IRRITATION MAY OCCUR IF FUMES RELEASED

FROM LEAKING BATTERY. INGESTION: NOT ANTICIPATED DUE TO SIZE OF BATTERY. IRRITATION, INCLUDING CAUSTIC BURNS/INJURY MAY OCCUR FOLLOWING EXPOSURE TO LEAKING BATTERY. SKIN CONTACT: IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY. EYE CONTACT: IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY.

Explanation of Carcinogenicity:NOT PROVIDED BY MFR

Effects of Overexposure:INHALATION: RESPIRATORY IRRITATION. INGESTION:

CAUSTIC BURNS/INJURY. SKIN: IRRITATION, CAUSTIC BURNS/INJURY. EYES: IRRITATION, CAUSTIC BURNS/INJURY.

Medical Cond Aggravated by Exposure:NOT PROVIDED BY MFR

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

First Aid:REQUIRED ONLY IN CASES OF A LEAKING BATTERY. EYES CONTACT: FLUSH WITH WATER FOR 30 MINUTES. GET MEDICAL ATTENTION. SKIN CONTACT: IRRIGATE EXPOSED SKIN WITH WATER FOR 15 MINUTES. IF IRRITATION, INJURY OR PAIN PERSISTS, CONSULT A PHYSICIAN. INHALATION: REMOVE TO FRESH AIR. CONTACT PHYSICIAN IF IRRITATION PERSISTS. INGESTION: RINSE MOUTH AND SURROUNDING AREA WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION FOR TREATMENT AND TO RULE OUT INVOLVEMENT OF THE ESOPHAGUS AND OTHER TISSUES.

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

Flash Point:NA

Autoignition Temp:Autoignition Temp Text:NA

Lower Limits:NA

Upper Limits:NA

Extinguishing Media:AS APPROPRIATE FOR SURROUND

ING FIRE.

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.

===== 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:NOT PROVIDED BY MFR

===== 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 TEMPERATURES. INSTALL BATTERIES IN ACCOR

DANCE WITH EQUIPMENT INSTRUCTIONS.

Other Precautions:DO NOT MIX BATTERY SYSTEMS, SUCH AS ALKALINE AND ZINC CARBON, 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 BATTERY TESTER OR BATTERY LABEL. KEEP BATTERIES AWAY FROM SMALL CHILDREN

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

Respiratory Protection:NONE UNDER NORMAL USE CONDITIONS.

Ventilation:GENERAL VENTILATION UNDER NORMAL CONDITIONS.

Protective Gloves:NONE UNDER NORMAL CONDITIONS. NEOPRENE, RUBBER/LATEX-RUBBER GLOVES FOR LEAKERS

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

Other Protective Equipment:NOT PROVIDED BY MFR,

Work Hygienic Practices:NOT PROVIDED BY MFR.

Supplemental Safety and Health

KEEP BATTERIES AWAY FROM SMALL CHILDREN.

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

HCC:Z7

Boiling Pt:B.P. Text:NA

Melt/Free

ze Pt:M.P/F.P Text:NA

Decomp Temp:Decomp Text:NOT PROVIDED BY MFR

Vapor Pres:NA

Vapor Density:NA

Spec Gravity:NA

pH:NA

Viscosity:NOT PROVIDED BY MFR

Evaporation Rate & Reference:NA

Solubility in Water:NA

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

Percent Volatiles by Volume:NOT PROVIDED

Corrosion Rate:NOT PROVIDED BY MFR

===== 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.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

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

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

Waste Disposal Methods:INDIVIDUALS MAY DISPOSE OF SPENT BATTERIES WITH HOUSEHOLD TRASH. DURACELL DOES NOT RECOMMEND THAT SPENT BATTERIES BE ACCUMULATED. QUANTITIES OF FIVE GALLONS OR MORE SHOULD BE DISPOSED OF IN A SECURE LANDFILL, IN ACCORDANCE WITH APPROPRIATE FEDERAL, STATE, AND LOCAL REGULATIONS. DO NOT INCINERATE; BATTERIES MAY

EXPLODE AT EXCESSIVE TEMPERATURES.

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

Transport Information:DOT HAZARD CLASS: NOT APPLICABLE. DOT SHIPPING NAME: NOT APPLICABLE. PLEASE NOTE: THESE BATTERIES ARE NOT REGULATED BY U.S. DOT OR INTERNATIONAL AGENCIES AS HAZARDOUS MATERIALS OR DANGEROUS GOODS WHEN SHIPPED. DURACELL USES THE ARTICLE NAME "ALKALINE BATTERIES - NON-HAZARDOUS" ON ALL DOMESTIC AND INTERNATIONAL BILLS OF LADING.

===== Regulatory Information =====

Federal Regulatory Information:ALL INGREDIENTS LISTED IN TSCA INVENTORY.

===== Other Information =====

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