

DURACELL USA -- ALKALINE MANGANESE DIOXIDE CELL,MN1604 -- 6135-00-900-2139

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

Product ID:ALKALINE MANGANESE DIOXIDE CELL,MN1604

MSDS Date:09/24/1991

FSC:6135

NIIN:00-900-2139

MSDS Number: BNRGJ

==== Responsible Party ====

Company Name:DURACELL USA

Address:BERKSHIRE INDUSTRIAL PARK

City:BETHEL

State:CT

ZIP:06801

Country:US

Info Phone Num:203-796-4000 OR 617-449-7600

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Preparer's Name:JIM DONAHUE/GEORGE WALLIS

CAGE:DO224

==== Contractor Identification ====

Company Name:DURACELL INC TECHNICAL SALES AND MARKETING GROUP

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Box:City:BETHEL

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Address:305 NEW HIGHWAY 64 E

City:LEXINGTON

State:NC

ZIP:27292

Phone:(617)449-7600

CAGE:DO224

===== Composition/Information on Ingredients =====

Ing

red Name:POTASSIUM HYDROXIDE (SARA III)

CAS:1310-58-3

RTECS #:TT2100000

Fraction by Wt: 8%

Other REC Limits:NOE SPECIFIED

OSHA PEL:C, 2 MG/M3

ACGIH TLV:C 2 MG/M3; 9192

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9

RTECS #:OP0350000

Fraction by Wt: 37%

Other REC Limits:NONE SPECIFIED

OSHA PEL:C 5 MG MN/M3, T-DUST

ACGIH TLV:5 MG MN/M3 T-DUST 92

Ingred Name:ZINC (SARA III)

CAS:7440-66-6

RTECS #:ZG8600000

Fraction by Wt: 15%

Other REC Limits:NONE SPECIFIED

O

SHA PEL:10 MG ZNO/M3, T-DUST

ACGIH TLV:10 MG ZNO/M3;TDUST92

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:MERCURY (SARA III)

CAS:7439-97-6

RTECS #:OV4550000

Fraction by Wt: 0.025%

Other REC Limits:NONE SPECIFIED

OSHA PEL:S, C, 0.1 MG/M3

ACGIH TLV:S, 0.05 MG/M3; 9192

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of C

arcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:THESE CHEMICALS ARE CONTAINED IN A SEALED CAN. RISK OF EXPOSURE OCCURS ONLY IF THE CELL IS MECHANICALLY OR ELECTRICALLY ABUSED. THE MOST LIKELY RISK IS ACUTE EXPOSURE WHEN A CELL LEAKS. POTASSIUM HYDR OXIDE IS CAUSTIC AND SKIN CONTACT CAN CAUSE BURNS. EYE CONTACT WITH POTASSIUM HYDROXIDE MAY CAUSE PERMANENT INJURY.

Effects of Overexposure:SKIN AND EYE CONTACT WITH POTASSIUM HYDROXIDE MAY CAUSE CHEMI

CAL BURNS. AT ELEVATED TEMPERATURES, MERCURY VAPOR MAY BE GENERATED WHICH SHOULD NOT BE INHALED.

Medical Cond Aggravated by Exposure:AN ACUTE EXPOSURE WILL NOT GENERALLY AGGRAVATE ANY MEDICAL CONDITION.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. SKIN: IF LEAKAGE FROM CELL CONTACTS SKIN, FLUSH WITH LARGE AMOUNTS OF WATER. INHALATION: MOVE TO FRESH AIR. INGESTION: GET MEDICAL ATTENTION.

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

Extinguishing Media:USE MEDIA SUITABLE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT WHEN A LARGE NUMBER OF CELLS ARE INVOLVED IN A FIRE.

Unusual Fire/Explosion Hazard:CELLS MAY RELEASE TOXIC MERCURY VAPORS WHEN INTEGRITY OF THE CANS IS BROKEN.

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

Spill Release Procedures:AVOID SKIN AND EYE CONTACT. DO NOT INHALE VAPORS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID MECHANICAL OR ELECTRICAL ABUSE. STORE AT ROOM TEMPERATURE. DO NOT ATTEMPT TO RECHARGE. DO NOT DISPOSE IN FIRE.

Other Precautions:INSTALL CELLS IN ACCORDANCE WITH EQUIPMENT INSTRUCTIONS. REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME. DO NOT MIX BATTERY SYSTEMS SUCH AS A

LKALINE AND ZINC CARBON IN SAME  
EQUIPMENT. DO NOT CARRY BATTERIES LOOSE IN POCKET OR BAG.

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

Respiratory Protection:NIOSH/MSHA APPROVED SCBA WHEN LARGE NUMBER OF CELLS ARE INVOLVED IN A FIRE.

Ventilation:SUBSEQUENT TO A FIRE PROVIDE AS MUCH VENTILATION AS POSSIBLE.

Protective Gloves:NEOPRENE, RUB/LATEX-NITRILE/FOR LEAKERS

Eye Protection:SAFETY GLASSES WHEN HANDLING LEAKERS.

Other Protective Equipment:NONE.

Work Hygiene

nic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

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

HCC:N1

Boiling Pt:B.P. Text:2408F,1320C

Melt/Freeze Pt:M.P/F.P Text:680F,360C

Vapor Pres:VERY LOW

Spec Gravity:5.0 (MNO<sub>2</sub>)

Appearance and Odor:RECTANGULAR WITH ROUNDED CORNERS. LENGTH 1.9 IN.,  
WIDTH 0.7 IN., HEIGHT 1.0 IN.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED

BY MANUFACTURER.

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

Hazardous Decomposition Products:WHEN HEATED, CELLS MAY EMIT HAZARDOUS VAPORS OF MERCURY AND CAUSTIC POTASSIUM HYDROXIDE.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:IN SMALL QUANTITIES, CELLS MAY BE DISPOSED OF WITH HOUSEHOLD TRASH. OPEN CELLS IN LARGE QUANTITIES SHOULD BE TREATED AS A HAZARDOUS WASTE

E. DO NOT INCINERATE SINCE CELLS MAY  
EXPLODE AT EXCESSIVE TEMPERATURE. DISPOSE I/A/W ALL LOCAL, STATE,  
& FED REGS.

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