

DURACELL INC., TECHNICAL SALES & MARKETING GROUP -- ALKALINE MANGANESE DIOXIDE CELL -- 6135-01-031-0862

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

Product ID:ALKALINE MANGANESE DIOXIDE CELL

MSDS Date:09/12/1995

FSC:6135

NIIN:01-031-0862

MSDS Number: CFYYQ

=== Responsible Party ===

Company Name:DURACELL INC., TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE CORPORATE PK

City:BETHEL

State:CT

ZIP:06801

C

Country:US

Info Phone Num:203-791-3273

Emergency Phone Num:203-791-3273

CAGE:MO633

=== Contractor Identification ===

Company Name:DURACELL INC TECHNICAL SALES AND MARKETING GROUP

Address:BERKSHIRE CORPORATE PARK

Box:City:BETHEL

State:CT

ZIP:06801

Country:US

Phone:203-796-4000

CAGE:90303

Company Name:DURACELL INC., TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE CORPORATE PK

Box:City:BETHEL

State:CT

ZIP:06801

Country:US

Phone:203-791-3273

CAGE:MO633

===== Composition/Information on

Ingredients =====

Ingred Name:POTASSIUM HYDROXIDE (CERCLA)

CAS:1310-58-3

RTECS #:TT2100000

Fraction by Wt: 8%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C 2 MG/M3

ACGIH TLV:C 2 MG/M3; 9596

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE DIOXIDE; MANGANESE(IV) OXIDE

CAS:1313-13-9

RTECS #:OP0350000

Fraction by Wt: 37%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3

Ingred Name:ZINC (SARA 313) (CERCLA)

CAS:7440-66-6

RTECS #:ZG8600000

Fraction by Wt:

15%

Other REC Limits:NONE RECOMMENDED

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Fraction by Wt: 11%

Other REC Limits:NONE RECOMMENDED

Ingred Name:CARBON, ACTIVATED

CAS:7440-44-0

RTECS #:FF5250100

Fraction by Wt: 4%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:3.5 MG/M3

Ingred Name:STEEL

Fraction by Wt: 18%

Other REC Limits:NONE RECOMMENDED

Ingred Name:BRASS

Fraction by Wt: 2%

Other REC Limits:NONE RECOMMENDED

Ingred Name:PLASTIC

Fraction by Wt

: 4%
Other REC Limits:NONE RECOMMENDED

Ingred Name:PAPER
Fraction by Wt: 1%
Other REC Limits:NONE RECOMMENDED

Ingred Name:MERCURY (SARA 313) (CERCLA)
CAS:7439-97-6
RTECS #:OV4550000
Fraction by Wt: NONE
Other REC Limits:NONE RECOMMENDED
OSHA PEL:C, 0.1 MG/M3; Z-2
ACGIH TLV:S,0.025 MG/M3; A4;96
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC
:NO OSHA:NO
Health Hazards Acute and Chronic:THE MOST LIKELY RISK IS ACUTE EXPOSURE
WHEN A CELL LEAKSS. POTASSIUM HYDROXIDE IS CAUSTIC AND SKIN CONTACT
CAN CAUSE BURNS. EYE CONTACT WITH POSTASSIUM HYDROXIDE MAY CAUSE
PERMANENT EYE INJURY. POTENTIAL DOES NOT EXIST FOR CHRONIC
EXPOSURE.
Explanation of Carcinogenicity:NOT REGULATED.
Effects of Overexposure:SKIN AND EYE CONTACT WITH POTASSIUM HYDROXIDE
MAY CAUSE CHEMICAL BURNS.
Medical Cond Aggravated by Exposure:AN ACUTE EXPOSURE
WILL NOT
GENERALLY AGGRAVATE ANY MEDICAL CONDITION.

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

First Aid:IF LEAKAGE FROM A CELL CONTACTS THE SKIN, FLUSH IMMEDIATELY
WITH WATER. FOR EYE CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER
FOR 15 MINUTES AND SEE A PHYSICIAN AT ONCE. IF VAPOR IS INHALED,
REMOVE TO FRESH AIR.

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

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE SELF-CONTAINED

BREATHING APPARATUS WHEN A LARGE NUMBER OF CELLS ARE INVOLVED IN A FIRE.

Unusual Fire/Explosion Hazard:CELLS MAY RELEASE TOXIC FUMES WHEN EXPOSED TO FIRE.

===== 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.

USE NEOPRENE, RUBBER OR LATEX-NITRILE GLOVES WHEN HANDLING LEAKERS. STORE AT ROOM TEMPERATURES.

Other Precautions:WASTE DISPOSAL-BATTERIES SHOULD NOT BE INCINERATED SINCE CELLS MAY EXPLODE AT EXCESSIVE TEMPERATURES. DISPOSAL SHOULD BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

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

Respiratory Protection:NONE UNDER NORMAL CONDITIONS.

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

Protective Gloves:USE NEOPRENE, RUBBER OR LATEX-NITRILE.

Eye Protection:WEAR SAFETY GLASSES WHEN HANDLING LEAKS.

Other Protective Equipment:NONE.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

DO NOT ATTEMPT TO RECHARGE. INSTALL CELLS IN ACCORDANCE WITH EQUIPMENT INSTRUCTIONS. DO NOT DISPOSE OF IN FIRE. REPLACE ALL BATTERIES IN EQUIPMENT AT THE SMAE TIME. DO NOT MIX BATTERY SYSTEMS SUCH AS ALKALINE AND ZINC

CARBON IN THE SAME EQUIPMENT. DO NOT CARRY BATTERIES LOOSE IN POCKET OR BAG.

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

HCC:N1

Appearance and Odor:KOH; CLEAR LIQUID. ZN; GRAY POWDER. MNO2; BLACK POWDER.

===== 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, CE

CELLS MAY EMIT VAPORS OF
CAUSTIC POTASSIUM HYDROXIDE.

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

Waste Disposal Methods: SPENT BATTERIES SHOULD BE DISPOSED OF IN SMALL QUANTITIES WITH NORMAL TRASH. DURACELL DOES NOT RECOMMEND THAT BATTERIES BE ACCUMULATED; HOWEVER, IF SPENT BATTERIES ARE ACCUMULATED, QUANTITIES OF FIVE GALLONS OR MORE SHOULD BE DISPOSED OF BY LANDFILL.

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