

DURACELL INC TECHNICAL SALES & MARKETING GROUP -- MERCURIC OXIDE CELL 303654A --  
6135-00-838-0706

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

Product ID:MERCURIC OXIDE CELL 303654A

MSDS Date:03/04/1997

FSC:6135

NIIN:00-838-0706

MSDS Number: BJZWZ

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE INDUSTRIAL PARK BLDG 9

City:BETHEL

State:CT

ZIP:06801

Coun

try:US

Info Phone Num:800-243-9540/FAX 203-796-4518

Emergency Phone Num:203-796-4682/4575

Preparer's Name:EH & S DEPARTMENT

CAGE:90303

=== 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:MORTON A D CO INC (216-946-5373)

CAGE:0GV58

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

Ingred Name:POTASSIUM HYDROXIDE

(CERCLA)

CAS:1310-58-3

RTECS #:TT2100000

Fraction by Wt: 9%

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:MERCURIC OXIDE (SARA 302/313) (CERCLA)

CAS:21908-53-2

RTECS #:OW8750000

Fraction by Wt: 35-45%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1 MG (HG)/M3; Z-2

ACGIH TLV:S,0.025 MG(HG)/M3;96

Ingred Name:MERCURY (SARA 313) (CERCLA)

CAS:7439-97-6

RTECS #:OV4550000

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

Ingred Name:ZINC (SARA 313) (CERCLA)  
CAS:7440-66-6  
RTECS #:ZG8600000  
Fraction by Wt: 15%  
Other REC Limits:10 MG/M3  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE OXIDE  
CAS:1317-35-7  
RTECS #:OP0895000  
Fraction by Wt: 6%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C 5 MG(MN)/M3  
ACGIH TLV:5 MG (MN)/M3; 9596

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

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outes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE AND CHRONIC- RISK OF EXPOSURE  
OCCURS ONLY IF CELL IS MECHANICALLY, PHYSICALLY OR ELECTRICALLY  
ABUSED. KOH IS CAUSTIC AND MAY CAUSE SKIN BURNS, SEVERE EYE INJURY.  
AT ELEVATED TEMPERATURES, MERCURY VAPORS MAY BE GENERATED WHICH  
CAN CAUSE MERCURY INTOXICATION.  
Explanation of Carcinogenicity:MFR LISTED NO FURTHER INFORMATION ABOUT  
THE CARCINOGENICITY OF THIS MATERIAL.  
Effects of Overexposure:SKIN & EYE CONTACT WITH KOH MAY CAUSE CHEMICAL  
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:IF LEAKAGE FROM CELL COMES INTO CONTACT WITH THE SKIN, FLUSH  
IMMEDIATELY WITH WATER. FOR EYE CONT

ACT, FLUSH EYES IMMEDIATELY  
WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES AND SEE A PHYSICIAN AT  
ONCE. F OR INHALATION OF HG VAPORS, REMOVE TO FRESH AIR. IF  
SWALLOWED, CONSULT PHYSICIAN AT ONCE. FOR INFO, CALL NATIONAL  
POISON CONTROL CENTER, 202-625-3333.

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

Flash Point:NONE  
Extinguishing Media:MFR: "N/A" HMIS: USE MEDIA APPROPRIATE FOR  
SURROUNDING FIRE.  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH  
APPROVED SCBA &  
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING FIRE WHERE THESE CELLS ARE  
INVOLVED.  
Unusual Fire/Explosion Hazard:CELLS MAY RELEASE TOXIC MERCURY VAPOR  
WHEN THE INTEGRITY OF THE CELL IS BROKEN.

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

Spill Release Procedures:HMIS:BATTERY AND CELL CASES WILL NORMALLY  
CONTAIN MATERIALS OF CONCERN. USE INDUSTRIAL ABSORBENT TO COLLECT  
LIQUID POTASSIUM HYDROXIDE. MFR:AVOID SKIN AND EYE CONTACT. DO NOT  
INH  
ALE VAPORS.  
Neutralizing Agent:WEAK ACID FOR POTASSIUM HYDROXIDE

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

Handling and Storage Precautions:STORE AT ROOM TEMPERATURE. AVOID  
BREAKING, CRUSHING OR OTHERWISE DESTROYING THE PHYSICAL INTEGRITY  
OF BATTERY. OBSERVE THE CORRECT POLARITY.  
Other Precautions:DO NOT INCINERATE. DO NOT TOUCH BROKEN OR LEAKING  
BATTERIES. AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT ATTEMPT TO  
RECHARGE. AVOID SHORT CIRCUITS. DO NOT C  
ARRY BATTERIES LOOSE IN  
POCKET OR BAG. KEEP BATTERIES AWAY FROM SMALL CHILDREN.

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

Respiratory Protection:SELF CONTAINED BREATHING APPARATUS IF CELLS ARE  
INVOLVED IN A FIRE.  
Ventilation:WHEN CELLS ARE INVOLVED IN A FIRE USE AS MUCH VENTILATION  
AS POSSIBLE.  
Protective Gloves:NEOPRENE, LATEX-NITRILE, OR RUBBER  
Eye Protection:SAFETY GLASSES WHEN HANDLING LEAKERS  
Other Protective Equipment:NONE  
Work Hygienic Practices:MF

R: ?. HMIS:USE GOOD CHEMICAL HYGIENE  
PRACTICE. AVOID UNNECESSARY CONTACT. WASH THOROUGHLY BEFORE EATING  
OR DRINKING.

Supplemental Safety and Health

REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME. DO NOT MIX BATTERY  
SYSTEMS (I.E. MERCURY, ALKALINE, ZINC-CARBON) IN THE SAME  
EQUIPMENT. INSTALL CELLS ACCORDING TO EQUIPMENT INSTRUCTIONS.

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

HCC:Z7

NRC/State Lic Num:NONE

Appearance and Odor:DRY CELL TYPE BATTERY 0

1.060 IN O.D. X 3.000 IN

LONG; 14 VOLTS.

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

Stability Indicator/Materials to Avoid:YES

NO INFORMATION GIVEN ON MSDS BY MFR.

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

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

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

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Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL  
REGULATIONS. NO SPECIAL PRECAUTIONS ARE NECESSARY FOR SMALL  
QUANTITIES OF MERCURY BATTERY. FOR DISPOSAL OF LARGE QUANTITIES OF  
BATTERY, CONSULT LOCAL ENVIRONMENTAL AGENCIES OR DURACELL. DO NOT  
INCINERATE!

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