

DURACELL INC TECHNICAL SALES & MARKETING GROUP -- 303534 MERCURIC OXIDE CELL --
6135-00-168-3722

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

Product ID:303534 MERCURIC OXIDE CELL

MSDS Date:01/11/1989

FSC:6135

NIIN:00-168-3722

MSDS Number: BJNTY

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE INDUSTRIAL PARK BLDG 9

City:BETHEL

State:CT

ZIP:06801

Country:US

Info Phone Num:203-796-4292

Emergency Phone Num:203-796-465

4/617-449-7600

Preparer's Name:JIM DONAHUE

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

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

Ingred Name:POTASSIUM HYDROXIDE (SARA III)

CAS:1310-58-3

RTECS #:TT2100000

Other REC Limits:NONE SPECIFIED

OSHA PEL:C, 2 MG/M3

ACGIH TLV:C 2 MG/M3; 9192

EPA Rpt Qty:100

0 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:MERCURIC OXIDE (SARA III)
CAS:21908-53-2
RTECS #:OW8750000
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG HG/M3;SKIN;C
ACGIH TLV:0.1 MG HG/M3; 9192

Ingred Name:MERCURY (SARA III)
CAS:7439-97-6
RTECS #:OV4550000
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

Ingred Name:ZINC (SARA III)
CAS:7440-66-6
RTECS #:ZG8600000
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG ZNO/M3
ACGIH TL
V:10 MG ZNO/M3; 9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE DIOXIDE
CAS:1313-13-9
RTECS #:OP0350000
Other REC Limits:NONE SPECIFIED
OSHA PEL:5 MG/M3 CEILING
ACGIH TLV:5 MG/M3 (AS MN DUST)

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

Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:BATTERY IS SEALED. RISK OF EXPOSURE
OCCURS ONLY IF THE CELL IS MECHANICA

LLY OR ELECTRICALLY ABUSED. IF
CELL LEAKS, KOH IS CAUSTIC. SKIN CONTACT CAN PRODUCE BURNS. EYE
CONTACT CAN RESULT IN SEVERE, PER MANENT INJURY. AT ELEVATED
TEMPERATURES, HG VAPOR GENERATED CAN PRODUCE MERCURY INTOXICATION.
Explanation of Carcinogenicity:NONE OF THE COMPOUNDS IN THIS PRODUCT IS
LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.
Effects of Overexposure:SKIN AND EYE CONTACT WITH KOH MAY CAUSE
CHEMICAL BURNS. AT ELEVATED TEMPERATURES, MERCURY VAPOR MAY BE
GENERATE
D 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 RUNNING WATER FOR 15 MINUTES WHILE HOLDING
EYELID. GET MEDICAL ATTENTION IMMEDIATELY. SKIN: WASH WITH SOAP &
WATER. REMOVE CONTAMINATED CLOTHING. INHALATION OF MERCURY VAPORS:
REMOVE TO FRESH AIR. GET MEDICAL ATTENTION.

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

Autoignition Temp:Autoignition Temp Text:NONE
Extinguishing Media:NONE SPECIFIED BY MANUFACTURER.
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE.
Unusual Fire/Explosion Hazard:CELLS MAY RELEASE TOXIC MERCURY VAPOR
WHEN THE INTEGRITY OF THE CAN IS BROKEN.

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

Spill Release Procedures:AVOID SKIN AND EYE C
ONTACT. DO NOT INHALE
VAPORS.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:USE NEOPRENE, RUBBER OR LATEX-NITRILE
GLOVES WHEN HANDLING LEAKERS. STORE AT ROOM TEMPERATURE. DO NOT
INCINERATE, SINCE CELLS MAY EXPLODE.
Other Precautions:AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT ATTEMPT
TO RECHARGE. AVOID SHORT CIRCUITS. INSTALL CELLS IN ACCORDANCE WITH
EQUIPMENT INSTRUCT

IONS. OBSERVE CORRECT POLARITY WHEN INSERTING
INTO EQUIPMENT. DO NOT DISPOSE OF IN FIRE(MAY EXPLODE).

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

Respiratory Protection:SELF-CONTAINED BREATHING APPARATUS WHEN CELLS
ARE INVOLVED IN A FIRE.

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

Protective Gloves:NEOPRENE OR NATURAL RUBBER GLOVES

Eye Protection:SAFETY GLASSES WHEN HANDLING LEAKERS.

Other Protective Equipment:NONE

Work Hygie

nic Practices:NONE

Supplemental Safety and Health

REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME. DO NOT MIX BATTERY
SYSTEMS SUCH AS ALKALINE AND ZINC CARBON IN SAME EQUIPMENT. DO NOT
CARRY BVATTERIES LOOSE IN POCKET, PURSE, OR BAG. KEEP BATTERI ES
AWAY FROM SMALL CHILDREN. IF SWALLOWED, CONSULT A PHYSICIAN AT
ONCE.

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

HCC:N1

Boiling Pt:B.P. Text:675F (HG)

Melt/Freeze Pt:M.P/F.P Text:680F (KOH)

Decomp Temp:D

ecomp Text:932F,500C

Vapor Pres:NIL

Spec Gravity:2.0 (KOH)

pH:BASIC

Solubility in Water:APPRECIABLE

Appearance and Odor:CYLINDRICAL 24 VOLT BATTERY 3.5 INCHES DIA X 2.625
INCHES LONG. W/ SOLDER TABS

Percent Volatiles by Volume:0

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

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

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

Hazardous Decomposition Products:W

HEN HEATED, CELLS MAY EMIT HAZARDOUS
HG VAPORS AND CAUSTIC KOH.

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

Waste Disposal Methods:NO SPECIAL PRECAUTIONS ARE REQUIRED FOR THE
DISPOSAL OF SMALL QUANTITIES OF SPENT MERCURY BATTERIES. CHECK WITH
YOUR LOCAL ENVIRONMENTAL AGENCIES OR DURACELL FOR INFORMATION
REGARDING THE PROPER DISPO SAL OF LARGE QUANTITIES OF MERCURY
BATTERIES.

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