

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

Countr

y:US

Info Phone Num:203-796-4292

Emergency Phone Num:203-796-4654/617-449-7600

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:1000 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

0
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG ZNO/M3
ACGIH TLV: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 S
EALED. RISK OF EXPOSURE

OCCURS ONLY IF THE CELL IS MECHANICALLY 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 BU

RNS. 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 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 T
O 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 CONTACT. 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 INSTRUCTIONS. 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 Hygienic 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 BATTERIES LOOSE IN POCKET, PURSE, OR BAG. KEEP BATTERIES 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:Decomp 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

SH, PUNCTURE
OR RECHARGE.

Hazardous Decomposition Products:WHEN 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.

Disclaimer

(provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.