

DURACELL INC TECHNICAL SALES & MARKETING GROUP -- TR146X, MERCURIC OXIDE CELL --
6135-00-763-5793

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

Product ID:TR146X, MERCURIC OXIDE CELL

MSDS Date:09/26/1990

FSC:6135

NIIN:00-763-5793

MSDS Number: BKLVP

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE INDUSTRIAL PARK BLDG 9

City:BETHEL

State:CT

ZIP:06801

Cou

ntry:US

Info Phone Num:203-796-4292

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

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

AC

GIH 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
DOT Rpt Qty:1 LB

Ingred Name:ZINC (SARA III)
CAS:7440-66-6
RTECS #:ZG8600000
Other REC Limits:NONE S
PECIFIED
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:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity: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. KOH IS CAUSTIC. SKIN CONTACT CAN PRODUCE BURNS. EYE CONTACT CAN RESULT IN SEVERE, PERMANENT INJURY. MERCURY INTOXICATION POSSIBLE

Effects of Overexposure:SKIN AND EYE CONTACT WITH KOH MAY CAUSE CHEMICAL BURNS. AT ELEVATED TEMPERATURES, MERCURY VAPOR MAY BE GENERATED WHICH SHOULD NOT BE INHALED.

Medical Cond Agg

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 CONTACT, FLUSH EYES IMMEDIATELY WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES AND SEE A PHYSICIAN AT ONCE. FOR INHALATION OF HG VAPORS, REMOVE TO FRESH AIR.

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

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE SELF-CONTAINED BREATHING APPARATUS WHEN CELLS ARE INVOLVED IN A 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.
Other Precautions:AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT ATTEMPT TO RECHARGE. AVOID SHORT CIRCUITS. INSTALL CELLS IN ACCORDANCE WITH EQUIPMENT. DO NOT DISPOSE OF IN A FIRE. REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME.

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

Respiratory Protection:SELF-CO

CONTAINED BREATHING APPARATUS WHEN CELLS
ARE INVOLVED IN A FIRE.

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

Protective Gloves:NEOPRENE, RUBBER OR LATEX-NITRILE GLOVES

Eye Protection:SAFETY GLASSES WHEN HANDLING LEAKERS.

Other Protective Equipment:NONE.

Supplemental Safety and Health

DO NOT MIX BATTERY SYSTEMS SUCH AS ALKALINE AND ZINC CARBON IN SAME
EQUIPMENT. DO NOT CARRY BATTERIES LOOSE IN POCKET, PURSE, OR BAG.

===== Physical/Chemical P
roperties =====

HCC:N1

Appearance and Odor:RECTANGULAR W/ ROUNDED CORNERS

===== 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:WHEN HEATED, CELLS MAY EMIT HAZARDOUSS
HG VAPORS AND CAUSTIC KOH.

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

Wast

e Disposal Methods:CHECK WITH YOUR LOCAL ENVIRONMENTAL AGENCIES OR
DURACELL FOR INFORMATION REGARDING THE PROPER DISPOSAL OF LARGE
QUANTITIES OF MERCURY BATTERIES. LARGE QUANTITIES OF OPEN CELLS
SHOULD BE TREATED AS HAZARDOUS WASTE. DO NOT INCINERATE.

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.