

DURACELL INC TECHNICAL SALES & MARKETING GROUP -- MN 1500(AA,LR6) ALKALINE
MANGANESE DIOXIDE CELL -- 6135-00-985-7845

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

Product ID:MN 1500(AA,LR6) ALKALINE MANGANESE DIOXIDE CELL

MSDS Date:03/04/1997

FSC:6135

NIIN:00-985-7845

MSDS Number: CGMWS

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE INDUSTRIAL PARK B

LDG 9

City:BETHEL

State:CT

ZIP:06801

Country:US

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

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 (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 (MNO2)

CAS:1313-13-9

RTECS #:OP0350000

Fraction by Wt: 37%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG MN/M3 CEILING

ACGIH TLV:5 MG MN/M3

Ingred Name:ZINC (SARA 313) (CERCLA) (ZN)

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

ER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 11%
Other REC Limits:NONE RECOMMENDED

Ingred Name:CARBON
Fraction by Wt: 4%
Other REC Limits:NONE RECOMMENDED

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(SARA313)(CERCLA),BATT DOES
NT CONTAIN ANY
INTENTIONALLY ADDED HG.ANY HG PRESENT WOULD BE IN TRACE QUANT AS
CONTAM

CAS:7439-97-6
RTECS #:OV4550000
Fraction by Wt: NA
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 =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:

NO

Health Hazards Acute and Chronic:THESE CHEMS/METALS ARE CONTAINED IN SEALED CAN.POTENTIAL FOR EXPOSURE SHOULD NOT EXIST UNLESS BATTERY LEAKS,IS EXPOSED TO HIGH TEMPS,IS ACCIDENTALLY SWALLOWED OR IS MECHANICALLY,PHYSICALLY,OR ELECTRI CALLY ABUSED.MOST LIKELY RISK IS ACUTE EXPO WHEN CELL LEAKS.KOH CAUSTIC,SKIN CONTACT CAN CAUSE BURNS.EYE CONTACT W/(SUP)

Explanation of Carcinogenicity:PER

MSDS:CARCINOGENCITY:NTP/IARC/OSHA:NO.

Effects of Overexposure:SKIN AND EYE CONTACT W/POTASSIUM HYDROXIDE

(KOH) MAY CAUSE CHEMICAL BURNS.

Medical Cond Aggravated by Exposure:AN ACUTE EXPOSURE WILL NOT GENERALLY AGGRAVATE ANY MED CONDITION.

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

First Aid:IF LEAKAGE FROM CELL CONTACTS SKIN FLUSH IMMED W/WATER.FOR EYE CONTACT FLUSH W/COPIOUS AMTS OF WATER FOR 15MINS & SEE PHYSICIAN @ONCE.IF VAPOR INHALED REMOVE TO FRESH AIR.

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

Flas

h Point:NA

Autoignition Temp:Autoignition Temp Text:NP

Lower Limits:NA

Upper Limits:NA

Fire Fighting Procedures:FIRE FIGHTER SHOULD USE SELF-CONTAINED BREATHING APPARATUS WHEN LARGE NUMBER OF CELLS ARE INVOLVED IN FIRE.CELLS MAY RELEASE TOXIC ZINC FUMES WHEN EXPO TO FIRE

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

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

Spill Release Procedures:AVOID SKIN/EYE CONTACT.DONT INHAL VAP.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID MECH OR ELECTRICAL EQPMT INSTRUCTIONS.DONT DISPO OF IN FIRE.REPLACE ALL BATT IN EQPMT @SAME TIME.

Other Precautions:DONT MIX BATT SYS SUCH AS ALKALINE & ZINC CARBON IN SAME EQPMT.DONT CARRY BATT LOOSE IN POCKET OR BAG.

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

Respiratory Protection:NONE UNDER

NORMAL CONDITIONS.

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

Protective Gloves:NEOPRENE,RUBB,LATEX-NITRILE WHEN LEAKING

Eye Protection:SAFETY GLASSES WHEN HNDLG LEAKERS

Other Protective Equipment:NONE

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

BOIL PT,C-KOH=1320;MNO2=NA;ZN907. SPEC GRAV-KOH=2.0;MNO2=5.0;ZN=7.14.

MELT PT,C-KOH=360;MNO2=535;ZN=420. HEALTH:KOH MAY CAUSE PERM EYE INJURY.POTENTIAL DOESNT EXIST FOR CHRO

NIC EXPO. DISPO:CELLS MAY E

XPLO @EXCESSIVE TEMPS.DISPO SHOULD BE IAW ALL APLICABLE FED/STATE/LOC REGS.

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

HCC:N1

Boiling Pt:B.P. Text:SUPPLEMENTA

Melt/Freeze Pt:M.P/F.P Text:SUPPLEMENTA

Decomp Temp:Decomp Text:NP

Vapor Pres:1 FOR ZN

Vapor Density:NA

Spec Gravity:SUPPLEMENTAL

pH:NP

Viscosity:NP

Evaporation Rate & Reference:NA

Solubility in Water:KOH=50%;MNO2/ZN=NA

Appearance and Odor:KOH-CLEAR LIQ;MNO2-BLACK POWDER;Z
N-GRAY POWDER

Percent Volatiles by Volume:NP

Corrosion Rate:NP

===== 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 CELLS MAY EMIT VAPORS OF
CAUSTIC POTASSIUM HYDROXIDE (KOH).

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

Waste Disposal Methods:SPENT/USED BATT SHOLD

BE DISPO OF IN SM QUANT

W/NORMAL TRASH.DURACELL DOESNT RECOMMEND THAT SPENT BATT BE ACCUMULATED;HOWEVER IF SPENT BATT ACCUMULATED QUANT OF 5 GALL OR MORE SHOULD BE DISPO OF SECUR E LANDFILL.BATT SHOULDNT BE INCINERATEDSINCE(SUP)

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