

DURACELL INC TECHNICAL SALES & MARKETING GROUP -- PC2400 PROCELL ALKALINE  
MANGANESE DIOXIDE CELL -- 6135-00-826-4798

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

Product ID:PC2400 PROCELL ALKALINE MANGANESE DIOXIDE CELL

MSDS Date:09/12/1995

FSC:6135

NIIN:00-826-4798

MSDS Number: CFMQY

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE INDUSTRIAL PARK BLD

G 9

City:BETHEL

State:CT

ZIP:06801

Country:US

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

Emergency Phone Num:203-796-4682/203-796-4575

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) (KOH)

CAS:1310-58-3

RTECS #:TT2100

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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

:WATER (H2O)  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 11%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CARBON (C)  
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 (SARA 313) (CERCLA);BATT DONT CONTAIN ANY INTENTIONALLY ADDED HG.IF ANY PRESENT WOULD BE TRACE QUANT AS CONTAMIN  
CAS:7439-97-6  
RTECS #:OV4550000  
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  
He

alth Hazards Acute and Chronic:THESE CHEMS/METALS CONTAINED IN SEALED CAN.POTENTIAL FOR EXPO SHOULDN'T EXIST UNLESS BATT LEAKS,IS EXPO TO HIGH TEMPS,IS ACCIDENTALLY SWALLOWED OR IS MECHANICALLY/PHYS/ELECTRICALLY ABUSED.MOST LIKELY RISK IS ACUTE EXPO WHEN CELL LEAKS.POTASSIUM HYDROXIDE(KOH)CAUSTIC,SKIN CONTACT CAN CAUSE BURNS,EYE CONTACT MAY (SUPPLE)

Explanation of Carcinogenicity:PER

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

Effects of Overexposure:SKIN & EYE CONTACT W/POTASSIUM HYDROXIDE (KOH)

MAY CAUSE CHEMICAL BURNS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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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 IS INHALED REMOVE TO FRESH AIR.

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

Flash Point:NA

Autoignition Temp:Autoignition

Temp Text:NP

Lower Limits:NA

Upper Limits:NA

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE SELF-CONTAINED BREATHING APPARATUS WHEN CELLS ARE INVOLVED IN FIRE.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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

Spill Release Procedures:AVOID SKIN/EYE CONTACT.DO NOT INHALE VAPORS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling a

nd Storage Precautions:AVOID MECHANICAL OR ELECTRICAL

ABUSE.USE NEOPRENE,RUBBER,LATEX-NITRILE GLOVES WHEN HANDLING LEAKERS.STORE AT ROOM TEMPERATURE.

Other Precautions:DONT ATTEMPT TO RECHARGE.INSTALL CELLS IN ACCORDANCE WITH EQPMT INSTRUCTIONS.DONT DISPOSE OF IN FIRE.REPLACE ALL BATT IN EQPMT @SAME TIME.DONT MIX BATT SYSTEMS SUCH AS ALKALINE & ZINC CARBON IN SAME EQPMT.DONT CARRY BATT LOOSE IN POCKET/BAG.

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

Respiratory

tory Protection:NONE UNDER NORMAL CONDITIONS.  
Ventilation:SUBSEQUENT TO FIRE PROVIDE AS MUCH VENTILATION AS POSSIBLE.  
Protective Gloves:NEOPRENE,RUB,LATEX-NITRILE WHEN LEAKING  
Eye Protection:SAF GLASSES WHEN HNDLG LEAKERS  
Other Protective Equipment:NONE  
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.  
Supplemental Safety and Health  
BPT(C):KOH:1320,MNO2:NA,ZN:907. VAP PRES(MMHG):KOH/MNO2:NA,ZN:1@487C.  
SOLUBILITY:KOH:50%,MNO2/ZN:0%. SPEC GRAV:KOH:2.0,MNO2:5.0,ZN:7.14.  
MELT PT(C):KOH  
:360,MNO2:535,ZN:420. HEALTH:CAUSE PERM EYE INJUR  
Y.POTENTIAL DOESNT EXIST FOR CHRONIC EXPO. MAY EXPLO @EXCESSIVE  
TEMPS.DISPO SHOULD BE IAW ALL APPLIC 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:SUPPLEMENT  
Vapor Density:NA  
Spec Gravity:SUPPLEMENTAL  
pH:NP  
Viscosity:NP  
Evaporation Rate & Reference:NA  
Solubility in Water:SUP  
PLEMENTAL  
Appearance and Odor:KOH:CLEAR LIQ; MNO2:BLACK POWDER; ZN: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:DONT HEAT, DISASSEMBLE, OR RECHARGE.  
Hazardous Decomposition Products:WHEN HEATED CELLS MAY EMIT VAPORS OF  
CAUSTIC POTASSIUM HYDROXIDE (KOH).

===== Disposal Considerations ===

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Waste Disposal Methods: SPENT/USED BATT SHOULD BE DISPO OF IN SM QUANT W/NORMAL TRASH. DURACELL DOESNT RECOMMENDED THAT SPENT BATT BE ACCUMULATED HOWEVER IF THEY ARE QUANT OF 5 GALLONS/MORE SHOULD BE DISPO OF IN SECURE LANDFILL. BATT SHOULDNT BE INCINERATED SINCE CELLS(SUPPL)

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