

DURACELL INC TECHNICAL SALES & MARKETING GROUP -- ALKALINE MANGANESE DIOXIDE CELL,MN(1300,140 -- 6135-01-174-8057

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

Product ID:ALKALINE MANGANESE DIOXIDE CELL,MN(1300,140

MSDS Date:06/15/1992

FSC:6135

NIIN:01-174-8057

MSDS Number: BNNJG

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES & MARKETING GROUP

Address:BERKSHIRE INDUSTRIAL PARK BLDG 9

Ci

ty: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:ARJAY ELECTRONICS CORP

Address:525 W CHESTER PIKE SUITE 314

Box:City:HAVERTOWN

State:PA

ZIP:19083-4539

Country:US

Phone:215-449-3600

CAGE:64812

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:9

0303

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

Ingred Name:POTASSIUM HYDROXIDE (SARA III)

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; 9293

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9

RTECS #:OP0350000

Fraction by Wt: 37%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG MN/M3 CEILING

-6
RTECS #:ZG8600000
Fraction by Wt: 15%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 MG ZNO/M3
ACGIH TLV:10 MG ZNO/M3; 9293
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:TLV FOR POTASSIUM HYDROXIDE IS 2 MG/M3.
Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE AND CHRONIC- RISK OF EXPOSURE
OCCURS ONLY IF CELL IS M
ECHANICALLY, PHYSICALLY OR ELECTRICALLY
ABUSED. KOH IS CAUSTIC AND MAY CAUSE SKIN BURNS, SEVERE EYE INJURY.
AT ELEVATED TEMPERATURES, ZINC FUMES MAY BE GENERATED WHICH CAN BE
HARMFUL IF INHALED.
Explanation of Carcinogenicity:NONE OF THE COMPOUNDS IN THIS PRODUCT IS
LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.
Effects of Overexposure:RISK OF EXPOSURE OCCURS ONLY IF CELL IS
MECHANICALLY, PHYSICALLY OR ELECTRICALLY ABUSED. KOH IS CAUSTIC AND
MAY CAUSE SKIN BURNS, SEVERE E
YE INJURY. AT ELEVATED TEMPERATURES,
METAL FUME SYMPTOMS MAY APPEAR.
Medical Cond Aggravated by Exposure:AN ACUTE EXPOSURE WILL NOT
GENERALLY AGGRAVATE ANY MEDICAL CONDITION.

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

First Aid:GET MEDICAL ATTENTION IMMEDIATELY. EYE/SKIN:IMMEDIATELY FLUSH
WITH WATER FOR AT LEAST 15 MINUTES. HOLD EYELIDS OPEN.
INHALED:REMOVE TO FRESH AIR & PROVIDE OXYGEN/CPR IF NEEDED.
ORAL:GET EMERGENCY MEDICAL ATTENTION.

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

Flash Point:NONE
Extinguishing Media:WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL
FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED
CONTAINERS.
Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED
SELF-CONTAINED BREATHING APPARATUS OPERATED IN THE POSITIVE
PRESSURE MODE.
Unusual Fire/Explosion Hazard:CELL MAY RELEASE TOXIC ZINC FUMES WHEN
EXPOSED TO FIRE.

===== Acciden

tal Release Measures =====

Spill Release Procedures: BATTERY AND CELL CASES WILL NORMALLY CONTAIN MATERIALS OF CONCERN. USE INDUSTRIAL ABSORBENT TO COLLECT LIQUID POTASSIUM HYDROXIDE. AVOID SKIN AND EYE CONTACT. DO NOT INHALE VAPORS. USE RUBBER GLOVES WHEN HANDLING LEAKERS OR INTERNAL PARTS OF CELLS.

Neutralizing Agent: ACID FOR POTASSIUM HYDROXIDE

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

Handling and Storage Precautions: STORE AT ROOM TEMPERATURE. AVOID

BREAKING, CRUSHING OR OTHERWISE DESTROYING THE PHYSICAL INTEGRITY OF THE CELL OR BATTERY.

Other Precautions: DO NOT TOUCH BROKEN OR LEAKING BATTERIES. AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT ATTEMPT TO RECHARGE. AVOID SHORT CIRCUITS. DO NOT CARRY BATTERIES LOOSE IN POCKET OR BAG. KEEP BATTERIES AWAY FROM SMALL CHILDREN.

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

Respiratory Protection: USE NIOSH APPROVED SELF-CONTAINED BREATHING

APPARATUS WHEN CELLS ARE INVOLVED IN A FIRE.

Ventilation: USE ADEQUATE LOCAL EXHAUST VENTILATION WHEN CELLS ARE INVOLVED IN A FIRE.

Protective Gloves: NEOPRENE, LATEX-NITRILE, OR RUBBER

Eye Protection: SAFETY GLASSES WHEN HANDLING LEAKERS

Other Protective Equipment: EYE WASH STATION

Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health

THIS MSDS COVERS MFR'S PART NUMBERS MN1300 (D), MN1400 (C), MN1500 (AA), MN2400

(AAA), MN9100 (N), MN908, MN918, MN1604, 5K69, 7K67

AND BATTERIES COMPRISED OF THESE CELLS.

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

HCC: N1

Boiling Pt: B.P. Text: 907F ZN

Melt/Freeze Pt: M.P/F.P Text: 360C KOH

Decomp Temp: Decomp Text: NOT KNOWN

Vapor Pres: 1 @ 487C ZN

Spec Gravity: 5.0 (MNO₂)

Evaporation Rate & Reference: NOT RELEVANT

Solubility in Water: 50 % KOH

Appearance and Odor: CLEAR LIQUID (KOH), BLACK POWDER (MNO₂), GREY POWDER (ZN)

===== St

ability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

NONE KNOWN

Stability Condition to Avoid: OVER-HEATING, RECHARGING, DISASSEMBLING,
CRUSHING OR INCINERATION

Hazardous Decomposition Products: CELL MAY RELEASE TOXIC ZINC FUMES AND
CAUSTIC POTASSIUM HYDROXIDE WHEN HATED.

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

Waste Disposal Methods: IN SMALL QUANTITIES, CELLS MAY BE DISPOSED OF
WITH HOUSEHOLD TRASH. OPEN CELLS IN LARGE
QUANTITIES SHOULD BE
TREATED AS A HAZARDOUS WASTE. DISPOSE IN ACCORDANCE WITH ALL
APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. DO NOT
INCINERATE.

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