

BATTERY ASSEMBLERS INC -- ALKALINE MANGANESE DIOXIDE CELLS,BAI-A 646 --
6135-00-334-4500

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

Product ID:ALKALINE MANGANESE DIOXIDE CELLS,BAI-A 646

MSDS Date:07/10/1992

FSC:6135

NIIN:00-334-4500

MSDS Number: BQKPH

=== Responsible Party ===

Company Name:BATTERY ASSEMBLERS INC

Address:211-4 KNICKERBOCKER AVE

City:BOHEMIA

State:NY

ZIP:11716

Country:US

Info Phone Num:516

-567-8855/FAX -8278

Emergency Phone Num:516-567-8855/HOME 516-751-8681

CAGE:0B0Y5

=== Contractor Identification ===

Company Name:BATTERY ASSEMBLERS INC

Address:211-4 KNICKERBOCKER AVE

Box:City:BOHEMIA

State:NY

ZIP:11716

Country:US

Phone:407-323-3390/EM:516-567-8855/8278

CAGE:0B0Y5

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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/M

3

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

ACGIH TLV:5 MG MN/M3

Ingred Name:ZINC (SARA III)

CAS:7440-66-6

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

Ingred Name:MERCURY (SARA III)

CAS:7439-97-6

RTECS #:

OV4550000

Fraction by Wt: 0.025%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:S, C, 0.1 MG/M3

ACGIH TLV:S, 0.05 MG/M3; 9293

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

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

LD50 LC50 Mixture:TLV FOR POTASSIUM HYDROXIDE:2 MG/M3 (C)

Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:RISK OF EXPOSURE OCCURS ONLY IF

BATTERY IS MECHANICALLY/ELECTRICALLY ABU

SED. IF A CELL LEAKS, KOH

IS CAUSTIC & SKIN CONTACT CAN CAUSE BURNS. EYE CONTACT WITH KOH MAY CAUSE PERMANENT INJURY. AT ELEVATE D TEMPERATURES, MERCURY VAPOR MAY BE GENERATED WHICH MAY CAUSE INTOXICATION. AVOID INHALATION. CHRONIC- NONE KNOWN.

Effects of Overexposure:RISK OF EXPOSURE OCCURS ONLY IF BATTERY IS MECHANICALLY/ELECTRICALLY ABUSED. IF A CELL LEAKS, KOH IS CAUSTIC & SKIN CONTACT CAN CAUSE BURNS. EYE CONTACT WITH KOH MAY CAUSE PERMANENT INJURY. AT ELEVATE D TEMPERATURES, MERCURY VAPOR MAY BE GENERATED WHICH MAY CAUSE INTOXICATION. AVOID INHALATION.

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

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

First Aid:GET MEDICAL ATTENTION IF SYMPTOMS DEVELOP.
EYE/SKIN:IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. HOLD EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR. ORAL:NOT LIKELY. GET EMERGENCY MEDICAL ATTENTI
ON, IF INGESTED.

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===== 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 FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WHEN LARGE NUMBER OF CELLS ARE INVOLVED IN A FIRE.

Unusual Fire/Explosion Hazard:CELLS MAY RELEASE TOXIC MERCURY VPORS.

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

Spill Release Procedures:BATTERY AND CELL CASES WILL NORMALLY CONTAIN MATERIALS OF CONCERN. USE INDUSTRIAL ABSORBENT TO COLLECT LIQUID POTASSIUM HYDROXIDE.

Neutralizing Agent:WEAK ACID FOR POTASSIUM HYDROXIDE

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

Handling and Storage Precautions:STORAGE- STORE AT ROOM TEMPERATURE. AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT INCINERATE.

Other Precautions:DO

NOT ATTEMPT TO RECHARGE. INSTALL CELLS IN ACCORDANCE WITH EQUIPMENT INSTRUCTIONS. DO NOT DISPOSE IN FIRE. REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME. DO NOT MIX BATTERIES. DO NOT CARRY BATTERIES LOOSE IN POCKET OR BAG.

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

Respiratory Protection:NIOSH-APPROVED SELF CONTAINED BREATHING APPARATUS WHEN LARGE NUMBER OF CELLS ARE INVOLVED IN A FIRE.

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

Protective Gloves:NEOPRENE,LATEX-NITRILE/RUBBER FOR LEAKER

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

MANUFACTURER STATES THAT CHEMICALS ARE CONTAINED IN A SEALED CAN. RISK OF EXPOSURE OCCURS ONLY IF THE BATTERY IS MECHANICALLY OR ELECTRICALLY ABUSED.

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

HCC:Z7

Boiling Pt:=1320.C, 2408.F

B.P. Text:1320C, KOH

Melt/Freeze Pt:=535.C, 995.F

M.P/F.P Text:535C MNO2

Vapor Pres:1 @ 487C

Spec Gravity:5.0 MNO2

Solubility in Water:50% KOH

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

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS

Stability Condition to Avoid:DO NOT HEAT, DISASSEMBLE OR RECHARGE.

Hazardous Decompos

ition Products:CELLS MAY RELEASE TOXIC MERCURY VPORS
AND CAUSTIC POTASSIUM HYDROXIDE.

===== 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 HAZARDOUS WASTE. DO NOT INCINERATE. DISPOSE OF IN
ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND
REGULATIONS.

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