

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

Product ID:ALKALINE BATTERY/CELL BA-59

MSDS Date:01/23/1995

FSC:6135

NIIN:00-120-1032

Status Code:A

MSDS Number: CJKVW

=== Responsible Party ===

Company Name:BREN-TRONICS INC

Address:10 BRAYTON CT

City:COMMACK

State:NY

ZIP:11725-3104

Country:US

Info Phone Num:516-499-5155

Emergency Phone Num:516.499.5155

CAGE:51828

=== Contractor Identification ===

Company Na

me:BREN-TRONICS INC

Address:10 BRAYTON CT

Box:City:COMMACK

State:NY

ZIP:11725-3104

Country:US

Phone:631-499-5155

Contract Num:SP0430-99-M-AF55

CAGE:51828

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

Ingred Name:POTASSIUM HYDROXIDE

CAS:1310-58-3

RTECS #:TT2100000

Minumum % Wt:5.

Maxumum % Wt:9.

ACGIH STEL:C2 MG/M3

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9

RTECS #:OP0350000

Minumum % Wt:32.

Maxumum % Wt:38.

OSHA PEL:C5 MG/M3

AC

GIH TLV:5 MG/M3

Ingred Name:ZINC
CAS:7440-66-6
RTECS #:ZG8600000
Minumum % Wt:11.
Maxumum % Wt:16.
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

===== 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 CHEMICALS ARE CONTAINED IN A
SEALED CAN. RISK O
F EXPOSURE OCCURS ONLY IF THE BATTERY IS
MECHANICALLY OR ELECTRICALLY ABUSED. MOST LIKELY, RISK IS WHEN A
CELL LEAKS. KOH (POTASSIUM HYDROXIDE) IS CAUSTIC AND SKIN CONTACT
CAN CAUSE IRRITATION OR BURNS. EYE CONTACT W/KOH MAY CAUSE
PERMANENT INJURY.
Explanation of Carcinogenicity:NONE SPECIFIED BY MANUFACTURER.
Effects of Overexposure:SKIN-IRRITATION, BURNS. EYES-PERMANENT INJURY.
Medical Cond Aggravated by Exposure:AN ACUTE EXPOSURE WILL NOT
GENERALLYAGGRAVATE ANY MEDICAL C
ONDITION.

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

First Aid:IF LEAKAGE FROM CELLS CONTACTS: SKIN-FLUSH WITH WATER AND
WASH WITH SOAP AND WATER. EYES-FLUSH WITH COPIOUS AMOUNTS OF WATER
FOR 15 MINUTES THEN SEE PHYSICIAN AT ONCE.

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

Flash Point:NA
Autoignition Temp:Autoignition Temp Text:NA
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE SELF-CONTAINED
BREATHING APPARATUS WHEN A LARGE N

NUMBER OF CELLS ARE INVOLVED.
Unusual Fire/Explosion Hazard:CELLS MAY RUPTURE WHEN HEATED
EXCESSIVELY.

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

Spill Release Procedures:AVOID SKIN AND EYE CONTACT. DO NOT INHALE
VAPORS. COLLECT ALL RELEASED MATERIAL IN PLASTIC BAG FOR WASTE
DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER. DLA-HMIS STAFF: 5%
ACETIC ACID SOLUTION.

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

Handling a

nd Storage Precautions:STORE IN A DRY PLACE. DO NOT RECHARGE.
DO NOT SHORT CIRCUIT.

Other Precautions:USE BATTERY ONLY IN PROPER EQUIPMENT. OBSERVE CORRECT
POLARITY WHEN INSTALLING INTO EQUIPMENT. DO NOT ATTEMPT TO
RECHARGE.

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

Respiratory Protection:AS IN ANY FIRE SITUATION, USE SELF-CONTAINED
BREATHING APPARATUS (SCBA).

Ventilation:N/A.

Protective Gloves:WHEN HANDLING LEAKING BATTERIES.

Eye Protection:N/A.

Other

Protective Equipment:N/A.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

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

HCC:Z7

Boiling Pt:B.P. Text:KOH (1320) MNO2 N/A ZN

Melt/Freeze Pt:M.P/F.P Text:KOH (360) MNO2 (535) ZN

Vapor Pres:KOH MNO2 (NA) ZN (1)@487C

Vapor Density:NA

Spec Gravity:KOH (2.0) MNO2 (5.0) ZN

Evaporation Rate & Reference:KOH MNO2, ZN (NA)

Solubility in Water:KOH (50%), MNO2 (0

%), ZN

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

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

Stability Indicator/Materials to Avoid:YES

N/A.

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

Hazardous Decomposition Products:WHEN HEATED, CELLS MAY EMIT HAZARDOUS VAPORS OF CAUSTIC KOH.

===== Toxicological Information =====

Toxicological Information:NONE

SPECIFIED BY MANUFACTURER.

===== Ecological Information =====

Ecological:NONE SPECIFIED BY MANUFACTURER.

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

Waste Disposal Methods:IN SMALL QUANTITIES, BATTERIES MAY BE DISPOSED OF WITH HOUSEHOLD TRASH. DO NOT INCINERATE! DISPOSE OF LARGE QUANTITIES IN ACCORDANCE WITH LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:NONE SP

ECIFIED BY MANUFACTURER.

===== Regulatory Information =====

SARA Title III Information:NONE SPECIFIED BY MANUFACTURER.

Federal Regulatory Information:NONE SPECIFIED BY MANUFACTURER.

State Regulatory Information:NONE SPECIFIED BY MANUFACTURER.

===== Other Information =====

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