This MSDS should be attached or kept with the respective product with which it is associated.

A. - IDENTIFICATION

COMPOSITION (1% OR GREATER)
- MANGANESE DIOXIDE (1313-13-9)
- ZINC (7440-66-6)
- POTASSIUM HYDROXIDE (35%) (1310-58-3)
- GRAPHITE, NATURAL (7782-42-5) OR SYNTHETIC (7440-44-0)
- WATER
- ALKALINE MANGANESE DIOXIDE BATTERIES: 113300 (D); MN1400 (C); MN1500 (AA); MN2400 (AAA); MX1300 (D); MX1400 (C); MX1500 (AA); MX2400 (AAA); MX2500 (AAA); MX1604 (9V); MN908 (LANERN6V); MN918 (LANERN4.5V); MN1604 (9V); MN1605 (9V); MX203 (4.5V); MN909 (1.5V); MX597 (PLATFACK); MX7 (PLATFACK) 1.5 AND BATTERIES COMPRISED OF THESE CELLS.

NAME: DURACELL ALKALINE BATTERIES

B. - PHYSICAL DATA

HOEING POINT: NA deg. F
MELTING POINT: NA deg. F
FREEZING POINT: NA deg. F
SPECIFIC GRAVITY: NA g/cm3
VAPOR DENSITY (AIR=1): NA
VAPOR PRESSURE @ deg. F: NA
EVPAPORATION (ETHER = 1): NA
SATURATION IN AIR (BY VOLUME @ deg. F): NA
AUTOIGNITION TEMPERATURE: NA deg. F
% VOLATILES: NA
SOLUBILITY IN WATER: NA
pH: NA
APPEARANCE/COLOR: COPPER TOP BATTERY. CONTENTS DARK IN COLOR.

C. - REACTIVITY

STABILITY: (X) STABLE
( ) UNSTABLE

CONDITIONS TO AVOID: DO NOT HEAT, CRUSH, DISASSEMBLE, SHORT CIRCUIT OR RECHARGE.

INCOMPATIBLE MATERIALS: CONTENTS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS.

POLYMERIZATION: ( ) MAY OCCUR
( ) WILL NOT OCCUR

CONDITIONS TO AVOID: NOT APPLICABLE

Hazardous Decomposition Products:
- THERMAL DEGRADATION MAY PRODUCE HAZARDOUS FUMES OF ZINC AND MANGANESE;
- HYDROGEN GAS;
- CAUSTIC VAPORS OF POTASSIUM HYDROXIDE AND OTHER TOXIC BY-PRODUCTS.

D. - HEALTH HAZARD DATA

OCCUPATIONAL EXPOSURE LIMITS (NEL, TLC, ETC.): 2 MG/M3 (RESPIRABLE, OSHA)
15 MG/M3 (TOTAL, OSHA)
8 HG/TWAS:
5 MG/M3 (OSHA)
5 MG/M3 (OSHA)

VENTILATION: GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.
"ENGINEERING CONTROLS: GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.

E. - ENVIRONMENTAL IMPACT

EXPOSURE CONTROL MEASURES:
- ENGINEERING CONTROLS: GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.
- WORK PRACTICES:

HANDLING AND STORAGE:
- STORE AT ROOM TEMPERATURE. AVOID MECHANICAL OR ELECTRICAL ABUSE.

F. - EXPOSURE CONTROL METHODS

ENGINEERING CONTROLS: GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.

SKIN PROTECTION: USE NON-SPILLING, RUBBER OR LATEX GLOVES WHEN HANDLING LEAKING BATTERIES.

RESPIRATORY PROTECTION: USE NON-SPILLING, RUBBER OR LATEX GLOVES WHEN HANDLING LEAKING BATTERIES.

OTHER: KEEP BATTERIES AWAY FROM SMALL CHILDREN.
(QUANTITIES OF FIVE GALLONS OR MORE SHOULD BE DISPOSED OF IN A SECURE LANDFILL), IN ACCORDANCE WITH APPROPRIATE FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT INCINERATE, SINCE BATTERIES MAY EXPLODE AT EXCESSIVE TEMPERATURES.

H. - EMERGENCY PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED TO THE ENVIRONMENT OR SPILLED IN THE WORK AREA:

1) NOTIFY SAFETY PERSONNEL OF LARGE SPILLS. CAUSTIC POTASSIUM HYDROXIDE MAY BE RELEASED FROM LEAKING OR Ruptured BATTERIES. AVOID EYE OR SKIN CONTACT AND INHALATION OF VAPOURS. INCREASE VENTILATION. CLEAN-UP PERSONNEL SHOULD WEAR APPROPRIATE PROTECTIVE GEAR.

FIRE AND EXPLOSION HAZARD:

BATTERIES MAY BURST AND RELEASE HAZARDOUS DECOMPOSITION PRODUCTS WHEN EXPOSED TO A FIRE SITUATION. SEE SEC. C.

EXTINGUISHING MEDIA: AS APPROPRIATE FOR SURROUNDING AREA.

FIREFIGHTING PROCEDURES:

USE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.

I. - FIRST AID AND MEDICAL EMERGENCY PROCEDURES

EYES:

NOT ANTICIPATED. IF BATTERY IS LEAKING AND MATERIAL CONTACTS EYES, FLUSH WITH ABUNDANT AMOUNTS OF CLEAR, TEPID WATER FOR 15 MINUTES. CONTACT PHYSICIAN AT ONCE.

SKIN:

NOT ANTICIPATED. IF BATTERY IS LEAKING, IMMEDIATELY WASH EXPOSED SKIN WITH ABUNDANT AMOUNTS OF CLEAR, TEPID WATER FOR AT LEAST 15 MINUTES. IF IRRITATION, SWELLING OR PAIN PERSISTS, CONSULT A PHYSICIAN.

INHALATION:

NOT ANTICIPATED. IF BATTERY IS LEAKING, CONTENTS MAY BE IRRITATING TO RESPIRATORY PASSAGES. REMOVE TO FRESH AIR. CONTACT PHYSICIAN IF IRRITATION PERSISTS.

INGESTION:

NOT ANTICIPATED. IF BATTERY IS LEAKING, CONTENTS MAY BE IRRITATING TO RESPIRATORY PASSAGES. REMOVE TO FRESH AIR. CONTACT PHYSICIAN IMMEDIATELY FOR TREATMENT AND TO RULE OUT INVOLVEMENT OF THE ESOPHAGUS AND OTHER TISSUES.

NOTES TO PHYSICIAN:

1) THE PRIMARY ACUTOXIC INGREDIENT IS CONCENTRATED (35%) POTASSIUM HYDROXIDE.

2) ANTICIPATED POTENTIAL LEAKAGE OF POTASSIUM HYDROXIDE IS 2-20 ML, DEPENDING ON BATTERY SIZE.

3) THIS MSDS DOES NOT INCLUDE OR ADDRESS THE SMALL BATTERY BUTTON CELLS, WHICH CAN BE INGESTED.

THIS MSDS COVERS THE FOLLOWING DISCONTINUED PRODUCT NUMBERS:

DAC100, 105, 110, 116-118, 123-124, 130, 200, 610, 810, 820, 918

THE INFORMATION CONTAINED IN THE MATERIAL SAFETY DATA SHEET IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

FOOTNOTES:

NA=NOT AVAILABLE

PLEASE NOTE:

SOME DURACELL ALKALINE BATTERIES CONTAIN THE DURACELL POWER CHECK(TM) BATTERY BENCH MARK WHICH IS A SMALL CONDUCTIVE STRIP LOCATED UNDERNEATH THE PVC BATTERY LABEL THAT INDICATES THE STATE OF ELECTION IN THE BATTERY. IT IS COMPOSED OF MINUTE QUANTITIES OF CONDUCTIVE MATERIALS. DUE TO THE SMALL QUANTITY OF MATERIALS AND THEIR SOLID FORM, A HEALTH OR ENVIRONMENTAL RISK IS UNLIKELY.