

ITEM: 5LE23 - PK24 Battery AA 1.5v**MSDS: L2926****ORDER: 0082206566****LP NUMBER: U842931981****MATERIAL SAFETY DATA SHEET (MSDS)****This MSDS should be attached or kept with the respective product with which it is associated.*******
MATERIAL SAFETY DATA SHEET - L2926*****
D. - HEALTH HAZARD DATAAssociated Grainger Items
5LE21, 5LE22, 5LE23, 5LE24, 5LE25, 5LE27, 8A514, 8A515, 9DR90, 9HUG1, 9W750

OCCUPATIONAL EXPOSURE LIMITS PEL'S, TLV'S, ETC.)

G
GILLETTE ENVIRONMENT HEALTH AND SAFETY
37 A STREET
NEEDHAM, MA 02492

8-HOUR TWAS:

TEL: 781.292.8151

MANGANESE DIOXIDE (AS Mn):
5.0 MG/M3 (CEILING) (OSHA)
0.2 MG/M3 (ACGIH/GILLETTE)

MATERIAL SAFETY DATA SHEET

POTASSIUM HYDROXIDE: 2 MG/M3 (CEILING) (ACGIH)

NAME: DURACELL PROCELL PROFESSIONAL ALKALINE BATTERIES

GRAPHITE (ALL KINDS EXCEPT FIBROUS):
2 MG/M (ACGIH; (SYNTHETIC)
15 MG/M (TOTAL, OSHA)
5 MG/M (RESPIRABLE, OSHA)

CAS NO: NOT APPLICABLE

THESE LEVELS ARE NOT ANTICIPATED UNDER NORMAL CONSUMER USE CONDITIONS.

EFFECTIVE DATE: 11/06/2003

WARNING SIGNALS: NOT APPLICABLE

REV: 3

ROUTES/EFFECTS OF EXPOSURE:

A. - IDENTIFICATION

THESE CHEMICALS AND METALS ARE CONTAINED IN A SEALED CAN. FOR CONSUMER USE, ADEQUATE HAZARD WARNINGS ARE INCLUDED ON BOTH THE PACKAGE AND ON THE BATTERY. POTENTIAL FOR EXPOSURE SHOULD NOT EXIST UNLESS THE BATTERY LEAKS, IS EXPOSED TO HIGH TEMPERATURES OR IS MECHANICALLY, PHYSICALLY, OR ELECTRICALLY ABUSED. CONTAINS CONCENTRATED (APPROX. 35%) POTASSIUM HYDROXIDE, WHICH IS CAUSTIC. ANTICIPATED POTENTIAL LEAKAGE VOLUME OF POTASSIUM HYDROXIDE IS 2 TO 20 ML, DEPENDING ON SIZE. A SIMILAR AMOUNT OF ZINC MAY ALSO LEAK.

	%
MANGANESE DIOXIDE (1313-13-9)	35-40
ZINC (7440-66-6)	10-25
POTASSIUM HYDROXIDE (35%) (1310-58-3)	5-10
GRAPHITE, NATURAL (7782-42-5) OR SYNTHETIC (7440-44-0)	1-5

FORMULA: MIXTURE

1. INHALATION:
RESPIRATORY (AND EYE) IRRITATION MAY OCCUR IF FUMES ARE RELEASED DUE TO HEAT OR AN ABUNDANCE OF LEAKING BATTERIES.

MOLECULAR WEIGHT: NA

2. INGESTION:
NOT ANTICIPATED DUE TO SIZE OF BATTERIES; CHOKING MAY OCCUR WITH THE SMALLER AAA BATTERY. IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY.SYNONYMS:
PROCELL ALKALINE MANGANESE DIOXIDE BATTERIES:
PC1300 (D); PC1400 (C); PC1500 (AA); PC2400 (AAA); PC903 (LANTERN); PC908 (6V); PC915 (6V); PC918 (6V); PC1604 (9V); PC9100 (N); PC7K67 (J) AND BATTERIES COMPRISED OF THESE CELLS.

3. SKIN:

B. - PHYSICAL DATAA. CONTACT:
IRRITATION, INCLUDING CAUSTIC BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERYBOILING POINT:
NA DEG. F
NA DEG. C

B. ABSORPTION: NOT ANTICIPATED.

MELTING POINT:
NA DEG. F
NA DEG. C4. EYE CONTACT:
IRRITATION, INCLUDING CAUSTIC/BURNS/INJURY, MAY OCCUR FOLLOWING EXPOSURE TO A LEAKING BATTERY.FREEZING POINT:
NA DEG. F
NA DEG. C

5. OTHER: NOT APPLICABLE

SPECIFIC GRAVITY (H2O=1): NA

E. - ENVIRONMENTAL IMPACT

VAPOR DENSITY (AIR=1): NA

1. APPLICABLE REGULATIONS: ALL INGREDIENTS LISTED IN TSCA INVENTORY.

VAPOR PRESSURE @ DEG. F: NA MMHg

2. DOT HAZARD CLASS: NOT APPLICABLE

EVAPORATION (ETHER = 1): NA

3. DOT SHIPPING NAME: NOT APPLICABLE

SATURATION IN AIR (BY VOLUME @ DEG. F): NA

PLEASE NOTE:

AUTOIGNITION TEMPERATURE DEG. F DEG. C: NA

THESE BATTERIES ARE NOT REGULATED BY U.S. DOT OR INTERNATIONAL AGENCIES AS HAZARDOUS MATERIALS OR DANGEROUS GOODS WHEN SHIPPED. DURACELL USES THE ARTICLE NAME 'ALKALINE BATTERIES - NON-HAZARDOUS' ON ALL DOMESTIC AND INTERNAL BILLS OF LADING.

% VOLATILES: NA

ENVIRONMENTAL EFFECTS:

SOLUBILITY IN WATER: NA

THESE BATTERIES PASS THE U.S. EPA'S TOXICITY CHARACTERISTIC LEACHING PROCEDURE AND THEREFORE, MAY BE DISPOSED OF WITH NORMAL WASTE.

pH: NA

F. - EXPOSURE CONTROL METHODS

APPEARANCE/COLOR: CYLINDRICAL BATTERIES. CONTENTS DARK IN COLOR.

ENGINEERING CONTROLS: GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.

FLASH POINT AND TEST METHOD(S): NA

EYE PROTECTION:

FLAMMABLE LIMITS IN AIR (% BY VOLUME):

NONE UNDER NORMAL USE CONDITIONS. WEAR SAFETY GLASSES WHEN HANDLING LEAKING BATTERIES.

LOWER: NA %

SKIN PROTECTION:

UPPER: NA %

NONE UNDER NORMAL USE CONDITIONS. USE NEOPRENE, RUBBER OR LATEX-NITRILE GLOVES WHEN HANDLING LEAKING BATTERIES.

C. - REACTIVITY

RESPIRATORY PROTECTION: NONE UNDER NORMAL USE CONDITIONS.

STABILITY:
(X) STABLE
() UNSTABLE

OTHER: KEEP BATTERIES AWAY FROM SMALL CHILDREN.

CONDITIONS TO AVOID:
DO NOT HEAT, CRUSH, DISASSEMBLE, SHORT CIRCUIT OR RECHARGE.*****
G. - WORK PRACTICES

INCOMPATIBLE MATERIALS: CONTENTS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS.

HANDLING AND STORAGE:

POLYMERIZATION:
() MAY OCCUR
(X) WILL NOT OCCUR

STORE AT ROOM TEMPERATURE. AVOID MECHANICAL OR ELECTRICAL ABUSE. DO NOT SHORT OR INSTALL INCORRECTLY. BATTERIES MAY EXPLODE, PYROLIZE OR VENT IF DISASSEMBLED, CRUSHED, RECHARGED OR EXPOSED TO HIGH TEMPERATURES. INSTALL BATTERIES IN ACCORDANCE WITH EQUIPMENT INSTRUCTIONS. DO NOT MIX BATTERY SYSTEMS, SUCH AS ALKALINE AND ZINC CARBON, IN THE SAME EQUIPMENT. REPLACE ALL BATTERIES IN EQUIPMENT AT THE SAME TIME. DO NOT CARRY BATTERIES LOOSE IN POCKET OR BAG.

CONDITIONS TO AVOID: NOT APPLICABLE

NORMAL CLEAN UP: 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.

WASTE DISPOSAL METHODS:

INDIVIDUAL CONSUMERS MAY DISPOSE OF SPENT (USED) BATTERIES WITH HOUSEHOLD TRASH. DURACELL DOES NOT RECOMMEND THAT SPENT BATTERIES BE ACCUMULATED (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.