

DURACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY) -- LITHIUM/MANGANESE DIOXIDE BATTERY,8410-3480 -- 6135-01-366-7476

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

Product ID:LITHIUM/MANGANESE DIOXIDE BATTERY,8410-3480

MSDS Date:01/13/1992

FSC:6135

NIIN:01-366-7476

MSDS Number: CBTJJ

=== Responsible Party ===

Company Name:DURACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY)

Address:305 NEW HIGHWAY 64 EAST

City:LEXIN

GTON

State:NC

ZIP:27292-2037

Country:US

Info Phone Num:203-796-4292

Emergency Phone Num:617-449-7600

CAGE:2A917

=== Contractor Identification ===

Company Name:AVED ELECTRONICS (508-688-3800)

Box:UNKNOWN

CAGE:0GXY4

Company Name:DURACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY)

Address:305 NEW HIGHWAY 64 EAST

Box:City:LEXINGTON

State:NC

ZIP:27292-2037

Country:US

Phone:617-449-7600

CAGE:2A917

Company Name:QUADTECH INC

Address:45 MAIN ST

Box:City:BOLTON

State:MA

ZIP:01740-1107

Country:US

Phone:800-253-

1230
CAGE:0PK96

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

Ingred Name:LITHIUM METAL
CAS:7439-93-2
RTECS #:OJ5540000
Fraction by Wt: 0.5%
Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE DIOXIDE
CAS:1313-13-9
RTECS #:OP0350000
Fraction by Wt: 5.6%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5 MG MN/M3 CEILING
ACGIH TLV:5 MG MN/M3

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
Fraction by Wt: 0.4%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:3.5 MG/M3
A
CGIH TLV:3.5 MG/M3; 9596

Ingred Name:TEFLON
Fraction by Wt: 0.2%
Other REC Limits:NONE RECOMMENDED

Ingred Name:PROPYLENE CARBONATE
CAS:108-32-7
RTECS #:FF9650000
Fraction by Wt: 0.73%
Other REC Limits:NONE RECOMMENDED

Ingred Name:ETHYLENE CARBONATE
Fraction by Wt: 0.25%
Other REC Limits:NONE RECOMMENDED

Ingred Name:DIMETHOXY ETHER
Fraction by Wt: 1.2%
Other REC Limits:NONE RECOMMENDED

Ingred Name:LITHIUM TRIFLUOROMETHANE SULFONATE
CAS:33454-82-9
Fraction by Wt: 0.1%
Other REC Limits:NONE RE

COMMENDED

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

LD50 LC50 Mixture:NOT RELEVANT

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 CELL IS MECHANICALLY, PHYSICALLY/ELECTRICALLY ABUSED. TARGET ORGANS:EYE, SKIN, LUNG. ACUTE- CONTACT WITH AN OPEN BATTERY WOULD BE HARMFUL. HARMFUL IF INGESTED/INHALED. MAY CAUSE CNS EFFECTS. FUMES MAY

IRRITATE EYES, SKIN & RESPIRATORY TRACT. LITHIUM MAY CAUSE CHEMICAL BURNS. CHRONIC- UNK

Explanation of Carcinogenicity:NONE

Effects of Overexposure:RISK OF EXPOSURE OCCURS ONLY IF CELL IS MECHANICALLY, PHYSICALLY OR ELECTRICALLY ABUSED. IF CELL IS LEAKING/IN FIRE: SEVERE IRRITATION, TEARING, DIZZINESS, HEADACHE, NAUSEA, BURNS, PAIN

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

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

First Aid:GET MEDICAL HELP IF SYMPTOMS PERSIST. INHALED:REMOVE TO FRESH AIR. EYES:FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. SKIN:IF CONTENTS OF BATTERY CONTACT SKIN, WASH WITH SOAP & WATER AT ONCE. OR AL:IF BATTERY/OPEN BATTERY IS INGESTED,DO NOT INDUCE VOMITING OR GIVE FOOD/DRINK. SEEK IMMEDIATE MEDICAL ATTENTION. CALL NATIONAL BATTERY INGESTION HOTLINE FOR ADVICE & FOLLOWUP (202-625-3333).

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

Flash Point:NOT RELEVANT

Extinguishing Media:USE WATER. WATER SPRAY MAY BE USED TO RAPIDLY COOL FIRE EXPOSED CONTAINERS AND BATTERIES.

Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:CELLS CAN VENT.

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

Spill Release Procedures:IF CELL IS PUNCTURED, VENTILATE AREA

WELL.
WEAR EYE AND SKIN PROTECTION. RESPIRATORY PROTECTION MAY BE NECESSARY IN CONFINED SPACES. ABSORB LIQUID WITH SUITABLE MATERIAL SUCH AS SAND OR CLAY. TRANSFER TO CONTAINER FOR LATER DISPOSAL.
Neutralizing Agent:NOT RELEVANT

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

Handling and Storage Precautions:STORE IN COOL, DRY PLACE. AVOID TEMPERATURES ABOVE 77F. NEVER CUT INTO CELL. DO NOT USE IN AIRTIGHT CONTAINERS. DO NOT INSTALL WITH INCORRECT POLARITY
Other Precautions:DO NOT INCINERATE. 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 OR LEAKING IN CONFINED SPACES.
Ventilation:ADEQUATE
Protective Gloves:NEOPRENE, RUBBER IF HANDLING LEAKERS
Eye Protection:SAFETY GLASSES WHEN HANDLING LEAKERS
Other Protective Equipment:EYE WASH STATION, QUICK DRENCH SHOWER
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.
Supplemental Safety and Health

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

HCC:N1
NRC/State Lic Num:NOT RELEVANT
Spec Gravity:NOT RELEVANT
Viscosity:NOT RELEVANT
Evaporation Rate & Reference:NOT RELEVANT
Solubility in Water:NOT RELEVANT
Appearance and Odor:SEALED BATTERY

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

Stability Indicator/Materials to Avoid:YES
Stability Condition to Avoid:HEAT, SHORT CIRCUIT, RECHARGE
Hazardous Decomposition Products:MAY FORM LITHIUM OXIDE, MANGANESE DIOXIDE, CARBON MONOXIDE, CARBON DIOXIDE.

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

Waste Disposal Methods:DISCHARGED CELLS MAY CONTAIN SIGNIFICANT AMOUNTS OF LITHIUM AND MANGANESE

ANT AMOUNT

OF ENERGY AND SHOULD BE HANDLED WITH CARE. THEY SHOULD BE ELECTRICALLY ISOLATED AND PACKED FOR DISPOSAL. DO NOT COMPACT. DISPOSE OF IN SANITARY LANDFILL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL LAWS.

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