

FUJI ELECTROCHEMICAL CO, LTD -- DL2032 LITHIUM MNO2 BATTERY -- 6135-01-210-8715

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

Product ID:DL2032 LITHIUM MNO2 BATTERY

MSDS Date:10/19/1988

FSC:6135

NIIN:01-210-8715

MSDS Number: BXYFR

=== Responsible Party ===

Company Name:FUJI ELECTROCHEMICAL CO, LTD

Address:5-36-11 SHIMBASHI

City:MINATO-KU TOKYO 105 JAPAN

Emergency Phone Num:203-796-4000/617-449-7600

Preparer's Name:T. MIZUNO

CAGE:S7173

=== Contractor Identification ===

Co

Company Name:DURACELL INC TECHNICAL SALES AND MARKETING GROUP

Address:BERKSHIRE CORPORATE PARK

Box:City:BETHEL

State:CT

ZIP:06801

Country:US

Phone:203-796-4000

CAGE:90303

Company Name:FUJI ELECTROCHEMICAL CO LTD

Address:HAMAGOMU BLDG 5-36-11 SHIMBASH MINATO-KU

Box:City:TOKYO 105

Country:JA

Phone:203-796-4000 (IMPORTER)

CAGE:S7173

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

Ingred Name:LITHIUM METAL

CAS:7439-93-2

RTECS #:OJ5540000

Fraction by Wt: 2.5%

Other REC Limits:NO

NE RECOMMENDED

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9

RTECS #:OP0350000

Fraction by Wt: 30%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG MN/M3 CEILING

ACGIH TLV:5 MG MN/M3

Ingred Name:GRAPHITE, SYNTHETIC

CAS:7440-44-0

RTECS #:FF5250100

Fraction by Wt: 3%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:2 MG/M3 TDUST; 9495

Ingred Name:PROPYLENE CARBONATE

CAS:108-32-7

AS:110-71-4
RTECS #:KI1451000
Fraction by Wt: 2.5%
Other REC Limits:NONE RECOMMENDED

Ingred Name:LITHIUM PERCHLORATE
CAS:7791-03-9
Fraction by Wt: 0.5%
Other REC Limits:NONE RECOMMENDED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: RISK OF EXPOSURE ONLY IF
BATTERY RUPTURES OR VENTS. EXPOSURE TO DME MAY BE HARMFUL; MAY
CAUSE REPRODUCTIVE HARM. LITHIUM MAY CAUSE THERMAL & CHEMICAL BURNS
ON CONTACT. CHRONIC: NONE SPECIFIED BY MANUFACTURER.
Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1%
OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.
Effects of Overexposure:SKIN-BURNS. EYES-BURNS. INHALED-UNKNOWN.
INGESTED-UNKNOWN.
Medical Cond Aggravated by Exposure:AN ACUTE EXPOSURE GENERALLY WILL
NOT AGGRAVATE ANY MEDICAL CONDITION.

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

First Aid:EYES-IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. SEEK
MEDICAL ATTENTION. SKIN-REMOVE CONTAMINATED CLOTHES. FLUSH WITH
WATER. INHALED-REMOVE TO FRESH AIR. INGESTED-CONTACT NATIONAL
BATTERY INGESTION HOTLINE 202-625-3333. OBTAIN IMMEDIATE MEDICAL
ATTENTION.

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

Extinguishing Media:WATER.
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND
FULL PROTECTIVE GEAR. COOL FIRE EXPOSED CONTAINERS WITH WATER.
Unusual Fire/Explosion Hazard:FIRE & EXPLOSION MAY OCCUR AS A RESULT OF
STACKING OR JUMBLING A LOTS OF BATTERIES.

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

Spill Release Procedures:LEAVE AREA TO ALLOW BATTERIES TO COOL AND
VAPORS TO DISSIPATE. AVOID SKIN AND EYE CONTACT OR INHALATION OF
VAPORS. REMOVE SPILLED LIQUID WITH ABSORBENT AND INCINERATE.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID MECHANICAL OR ELECTRICAL ABUSE.

Other Precautions:BATTERIES MAY EXPLODE, PYROLIZE OR VENT IF SHORTED, DISASSEMBLED, CRUSHED, RECHARGED OR EXPOSED TO FIRE OR HIGH TEMPERATURES.

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

Respiratory Protection:IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED RESPIRATOR OR

AN AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910.13 4 AND MANUFACTURER'S RECOMMENDATIONS.

Ventilation:IF VENTING; USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:RUBBER.

Eye Protection:SAFETY GLASSES.

Other Protective Equipment:NONE.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

BATTERY SHOULD BE IN ACCORDANCE WITH ANSI STANDARD C18.3M-1991 USING SPECIFICATION SHEET 10-0787-0126 FOR ANSI/NEDA NUMBER 5004LC.

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

HCC:N1

Appearance and Odor:BATTERY. CYLINDRICAL. 0.787 X 0.106 INCHES. 3.0 VOLTS.

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

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

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

Hazardous Decomposition Products:NONE SPECIFIED BY MANUFACTURER.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS. OPEN BATTERIES SHOULD BE TREATED AS HAZARDOUS WASTE.

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