

SANYO ELECTRIC LTD -- MANGANESE DIOXIDE LITHIUM PRIMARY BATTERIES

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MSDS Safety Information
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FSC: 6135
NIIN: 01-478-3935
MSDS Date: 01/01/1999
MSDS Num: CLQCV
Product ID: MANGANESE DIOXIDE LITHIUM PRIMARY BATTERIES
MFN: 01
Responsible Party
Cage: S4091
Name: SANYO ELECTRIC CO LTD
Address: 18 KEIHAN HONTORI -2
CHOME
City: MORIGUCHI-SHI NK 00000
Country: JA
Emergency Phone Number: (619) 661-6520
Published: Y

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Contractor Summary
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Cage: 4U927
Name: MATHEWS ASSOCIATES INC
Address: 645 HICKMAN CIRCLE
City: SANFORD FL 32771
Phone: 407-323-3390
Contract Number: SP0430-02-M-P068
Cage: S4091
Name: SANYO ELECTRIC CO LTD
Address: 18 KEIHAN HONTORI -2 CHOME
City: MORIGUCHI-SHI NK 00000
Country: JA

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Item Description Information
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Item Manager: S9G
Item Name: BATTERY, NONRECHARGEABLE
Unit of Issue: EA
Type of Container: EACH

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Health Hazards Data
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Route Of Entry Inds - Inhalation: YES
Skin: YES
Ingestion: YES
Carcinogenicity Inds - NTP: NO
IARC: NO
OSHA: NO
Effects of Exposure: TH

THESE CHEMICALS ARE CONTAINED IN A SEALED CAN. RISK OF EXPOSURE OCCURS ONLY IF THE BATTERY IS MECHANICALLY OR ELECTRICALLY ABUSED. THE MOST LIKELY RISK IS ACUTE EXPOSURE WHEN A CELL VENTS. DME IS BELIEVED TO BE SLIGHTLY TO MODERATELY TOXIC, AND EC AND BC ARE CONSIDERED TO BE NON-TOXIC BUT MODERATELY IRRITATING TO THE EYES. LiCF₂SO₃ IS IRRITATING TO SKIN, EYES AND MUCOUS MEMBRANES. CONTACT OF ELECTROLYTE AND EXTRUDED LITHIUM WITH SKIN AND EYES SHOULD BE AVOIDED.

Signs And Symptoms Of

Overexposure: DME MAY BE A REPRODUCTIVE HAZARD. LITHIUM CAN CAUSE THERMAL AND CHEMICAL BURNS UPON CONTACT WITH SKIN.

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

First Aid: IN CASE OF SKIN CONTACT WITH CONTENTS OF BATTERY, FLUSH IMMEDIATELY WITH WATER. FOR EYE CONTACT, FLUSH WITH COPIOUS AMOUNT OF WATER FOR 15 MINUTES. DO NOT INHALE VENTED MATERIAL. IF IRRITATION PERSISTS, GET MEDICAL HELP.

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Handling and Disposal

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Spill Release Procedures: THE PREFERRED RESPONSE IS TO LEAVE THE AREA AND ALLOW BATTERIES TO COOL AND VAPORS TO DISSIPATE. AVOID SKIN AND EYE CONTACT OR INHALATION OF VAPORS. REMOVE SPILLED LIQUID WITH ABSORBENT AND INCINERATE .

Waste Disposal Methods: DISPOSE IN ACCORDANCE WITH APPROPRIATE REGULATIONS. OPEN CELLS SHOULD BE TREATED AS HAZARDOUS WASTES.

Handling And Storage Precautions: AVOID MECHANICAL OR ELECTRICAL ABUSE.

Other Precautions: BATTERIES MAY EXPLODE OR CAUSE BURNS, IF DISASSEMBLED, CRUSHED, RECHARGED OR EXPOSED TO FIRE OR HIGH TEMPERATURE. DO NOT SHORT NOR INSTALL WITH INCORRECT POLARITY.

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Fire and Explosion Hazard Information

Flash Point: =-1.C, 30.2F

Flash Point Text: DME

Extinguishing Media: WATER. FOR BULK QUANTITIES OF UNPACKAGED CELL USE LITH-X (GRAPHIT BASE). IN THIS CASE, USE NO WATER.

Fire Fighting Procedures: IN CASE OF FIRE IN AN ADJACENT AREA, USE WATER. CO₂ OR DRY CHEMICAL EXTINGUISHERS IF CELLS ARE PACKED IN THEIR ORIGINAL CONTAINERS SINCE THE FUEL OF THE FIRE IS BASICALLY PAPER PRODUCTS. FOR BULK QUANTITIES OF UNPACKAGED CELL USE LITH-X (GRAPHIT BASE). IN THIS CASE, USE NO WATER.

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Control Measures

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ory Protection: NOT NECESSARY UNDER CONDITIONS OF NORMAL USE.
Ventilation: NOT NECESSARY UNDER CONDITIONS OF NORMAL USE.
Protective Gloves: NOT NECESSARY UNDER CONDITIONS OF NORMAL USE.
Eye Protection: NOT NECESSARY UNDER CONDITIONS OF NORMAL USE.
Other Protective Equipment: NOT NECESSARY UNDER CONDITIONS OF NORMAL USE.
Supplemental Safety and Health: ITEM IS LITHIUM MANGANESE DIOXIDE BATTERY
ASSEMBLY CONTAINING 2 PARALLEL STRINGS EACH WITH 3 CR-2 SIZE CELLS &
SCHOTTKY BLOCKING DIODE.

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Physical/Chemical Properties
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HCC: Z6

Evaporation Rate & Reference: DME-4.99

Solubility in Water: EC,BC-MODERATE.

Appearance and Odor: LITHIUM IS A SOFT, SILVERY METAL. MNO2 IS A BLACK POWDER.

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Reactivity Data
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Stability Indicator: YES

Stability Condition To Avoid: DO NOT H
EAT, DISASSEMBLE, OR RECHARGE.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: WILL NOT OCCUR.

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Toxicological Information
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Ecological Information
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MSDS Transport Information
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Transport Information: ITEM IS MARKED AS: LITHIUM BATTERIES, SOLID CATHODE,9,
UN3090.
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Regulatory Information
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Other Information
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Transportation Information
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Responsible Party Cage: S4091
Trans ID NO: 159752
Product ID: MANGANESE DIOXIDE LITHIUM PRIMARY BATTERIES
MSDS Prepared Date: 01/01/1999
Review Date: 11/07/2001
MFN: 1
Multiple KIT Number: 0
Unit Of Issue: EA
Type Of Container: EACH
Additional Data: UN NUMBER 3090 PER MARKINGS ON THE BOX.
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Detail DOT Information
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DOT PSN Code: IJN
DOT Proper Shipping Name
: LITHIUM BATTERY
Hazard Class: 9
UN ID Num: UN3090
DOT Packaging Group: II
Label: CLASS 9
Special Provision: 29
Packaging Exception: NONE
Non Bulk Pack: 185
Bulk Pack: NONE
Max Qty Pass: 5 KG
Max Qty Cargo: 35KGGROSS
Vessel Stow Req: A
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Detail IMO Information
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IMO PSN Code: JAM
IMO Proper Shipping Name: LITHIUM BATTERIES
IMDG Page Number: 9033
UN Number: 3090
UN Hazard Class: 9
IMO Pac
kaging Group: II
Subsidiary Risk Label: -
EMS Number: 4.1-06
MED First Aid Guide NUM: NON
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Detail IATA Information
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IATA PSN Code: PFV
IATA UN ID Num: 3090
IATA Proper Shipping Name: LITHIUM BATTERIES +
IATA UN Class: 9
IATA Label: MISCELLANEOUS
UN Packing Group: II
Packing Note Passenger: 903
Max Quant Pass: 5KG G
Max Quant Cargo: 35KG G
Packaging Note Cargo: 903
Exceptions: A45
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Detail AFI Information
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AFI PSN Code: PFT
AFI Proper Shipping Name: LITHIUM BATTERIES,
AFI PSN Modifier: LIQUID OR SOLID CATHODE
AFI Hazard Class: 9
AFI UN ID NUM: UN3090
AFI Packing Group: II
Special Provisions: P5
Back Pack Reference: A13.8
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HAZCOM Label
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Product ID: MANGANESE DIO
XIDE LITHIUM PRIMARY BATTERIES
Cage: S4091
Company Name: SANYO ELECTRIC CO LTD
Street: 18 KEIHAN HONTORI -2 CHOME
City: MORIGUCHI-SHI NK
Zipcode: 00000
Country: JA
Health Emergency Phone: (619) 661-6520
Label Required IND: Y
Date Of Label Review: 11/07/2001
Status Code: A
Year Procured: 2002
Origination Code: F
Eye Protection IND: YES
Skin Protection IND: YES
Signal Word: CAUTION
Health Hazard: Slight
Contact Hazard: Slight
Fire Hazard: Slight
Reactivity Hazard: None
Hazard And Precautions: THES

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