
SECTION 1 - IDENTIFICATION

PRODUCT (TRADE) NAME: Lithium Battery
CHEMICAL FAMILY: Lithium/Manganese Dioxide

SUPPLIER: OMEGA ENGINEERING, INC.
P.O. BOX 4047
STAMFORD, CT 06907

TELEPHONE: (203) 359-1650

SHIPPING NAME (UN NUMBER PER TRANSPORTATION AUTHORITY):
DOT: N/A

DATE PREPARED: 7/31/91
SUPERSEDES: --

SECTION 2 - HAZARDOUS INGREDIENTS

IMPORTANT NOTE: The battery should not be opened or incinerated since the following ingredients, contained within, could be harmful under some circumstances if exposed.

MATERIAL OR INGREDIENT	%	TLV (ACGIH)	PEL: (OSHA)
Manganese Dioxide	19-40	5 mg/m3 Ceiling (As Manganese)	5 mg/m3 Ceiling (As Manganese)
Propylene Carbonate	4.1-9.8	None Established	
Dimethoxyethane	4.1-9.8	None Established	
Lithium	1.2-2.7	None Established	
Lithium Perchlorate	0.9-2.0	None Established	

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

In case of fire in an adjacent area, if cells and batteries are in their original containers, the use of water, CO2 or dry chemical extinguisher is acceptable. The fire is basically the burning of paper and plastic products.

If the contents of a cell are on fire, LITH-X (graphite bronze) should be used. Avoid water, CO2 and Halogen extinguishers. Avoid fume inhalation as it may contain LiOH.

SECTION 4 - HEALTH HAZARD DATA

EFFECTS OF SINGLE EXPOSURE TO CELL CONTENTS:

SWALLOWING: If battery becomes open, the contents may cause serious localized burns. (Consult Physician).

SKIN ABSORPTION: No evidence of adverse effects is available information.

INHALATION: No evidence of adverse effects in available information.

SKIN CONTACT: Contents from an opened battery may cause chemical burns.

EYE CONTACT: Contents from an opened battery may cause severe irritation and chemical burns.

OTHER EFFECTS OF EXPOSURE TO CONTENTS:

Contains less than 0.8% dimethoxyethane which has been shown to cause birth defects in laboratory animals.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

A knowledge of the available toxicology information and of the physical and chemical properties of the material suggest that overexposure is unlikely to aggravate existing medical conditions.

EMERGENCY AND FIRST AID PROCEDURE

SWALLOWING: Do not induce vomiting. See medical attention immediately.

SKIN: If the contents of an opened battery comes in contact with the skin, wash with soap and water. If irritation persists or contact has been prolonged, call a physician.

INHALATION: No emergency care anticipated.

EYES: If the contents of an opened battery come in contact with the eyes, immediately flush eyes thoroughly with water and continue flushing for at least 15 minutes. Seek medical attention.

SECTION 5 - PRECAUTIONS FOR SAFE HANDLING AND USE

STORAGE: Safe stacking of battery cartons up to 60" high, including pallet, and no more than 3 pallets high.

MECHANICAL CONTAINMENT: If there are special encapsulation or sealing requirements, consult us about special hazard precautions or limitations.

HANDLING: The accidental short circuiting of the cell/battery for 1-2 seconds will not seriously harm the cell/battery. Prolonged short circuiting should be avoided since the battery is being discharged and at high temperature could even rupture. Avoid the use of metal covered tables or metal belts in assembly operations involving batteries, as the metal can be a source for short circuits. Insulating materials should be used on assembly and work surfaces.

If soldering or welding to the terminals is required, consult us for proper precautions to prevent seal damage or internal short circuiting.

CHARGING: The cell is not designed for recharging. To do so may cause leakage, or in some cases, cell rupture.

LABELING: If the normal label or package warnings are not visible, the package or device label should provide a label stating:

CAUTION: Battery can leak or rupture if heated, disassembled, shorted, exposed to fire or high temperature or inserted incorrectly. Keep away from small children. If swallowed, consult a physician at once.

DISPOSAL: Do not incinerate or subject cells to temperature in excess of 75 degrees C. Such treatment can vaporize the liquid electrolyte and cause cell rupture.

Dispose of in accordance with appropriate Federal, State and local regulations.

SECTION 6 - SPECIAL PROTECTION INFORMATION

- VENTILATION REQUIREMENTS: Not necessary under normal use conditions.
- RESPIRATORY PROTECTION: Not necessary under normal use conditions.
- EYES: Not required
- GLOVES: Not required

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