

ELECTROCHEM INDUSTRIES, DIV. OF WILSON GREATBATCH -- LITHIUM OXYHALIDE PRIMARY BATTERY (CSC) -- 6135-01-425-9687

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

Product ID:LITHIUM OXYHALIDE PRIMARY BATTERY (CSC)

MSDS Date:05/25/1999

FSC:6135

NIIN:01-425-9687

Status Code:A

MSDS Number: CKYGY

=== Responsible Party ===

Company Name:ELECTROCHEM INDUSTRIES, DIV. OF WILSON GREATBATCH

Address:10000 WEHRLE DR.

City:CLARENCE

State:NY

ZIP:14031-2033

Country:US

Info Phone Num:716-759

-5384

Emergency Phone Num:716/759-6901

CAGE:62713

=== Contractor Identification ===

Company Name:ELECTROCHEM INDUSTRIES, DIV. OF WILSON GREATBATCH

Address:10000 WEHRLE DR.

City:CLARENCE

State:NY

ZIP:14031-2033

Country:US

Phone:716-759-5384

CAGE:62713

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

Ingred Name:LITHIUM (LI)

CAS:7439-93-2

RTECS #:OJ5540000

Ingred Name:SULFURYL CHLORIDE (SO<sub>2</sub>CL<sub>2</sub>)

CAS:7791-25-5

RTECS #:WT4870000

Ingred Name:CHLORINE (CL<sub>2</sub>)

CAS:7782-50-5

RTECS #

:FO2100000  
OSHA PEL:C3 MG/M3;C1 PPM  
ACGIH TLV:1.5 MG/M3;0.5 PPM  
ACGIH STEL:2.9 MG/M3;1 PPM  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Health Hazards Acute and Chronic:THIS PRODUCT IS CLASSIFIED AS AN  
ARTICLE UNDER OSHA REGULATION 1910-1200 (C). BURNS TO THE SKIN MAY  
RESULT FROM THE HEAT GENERATED BY A SHORT-CIRCUIT. IMPORTANT NOTE:  
THE BATTERY CONTAINER SHOULD NOT BE OPENED OR INCINERATED SINCE  
THE INGREDIENTS COULD BE HARMFUL UNDER SOME CIRCUMSTANCES IF  
EXPOSED. LITHIUM IS INCLUDED IN THIS SECTION DUE TO ITS VIGOROUS  
REACTION WITH WATER FORMING A CAUSTIC HYDROXIDE.  
Effects of Overexposure:SKIN: BURNS FROM HEAT GENERATED BY A  
SHORT-CIRCUIT. IMPORTANT NOTE: THE BATTERY CONTAINER SHOULD NOT BE  
OPENED OR INCINERATED SINCE THE INGREDIENTS COULD BE HARMFUL UNDER  
SOME CIRCUMSTANCES IF EXPOSED .

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

First Aid:INGESTION: IN CASE OF INGESTION OF A CELL OR ITS CONTENTS,  
OBTAIN PROMPT MEDICAL ADVICE.

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

Extinguishing Media:IF INVOLVED IN FIRE, DO NOT USE WATER, CO2, DRY  
CHEMICAL, HALOGEN EXTINGUISHERS. USE LITH-X (GRAPHITE BASE)  
EXTINGUISHER OR MATERIAL ONLY FOR FIRES INVOLVING LITHIUM METAL OR  
CELLS.  
Fire Fighting Procedures:USE A LITH-X (GRAPHITE BASE) FIRE EXTINGUISHER  
OR MATERIAL ONLY, FOR FIRES INVOLVING LITHIUM METAL OR CELLS. IF A  
FIRE IS IN AN ADJACENT AREA, AND CELLS ARE PACKED IN THEIR ORIGINAL  
CONTAINERS, FIRE CAN BE FOUGHT BASED ON FUELING MATERIAL, E.G;  
PAPER AND PLASTIC PRODUCTS. AVOID FUME INHALATION.  
Unusual Fire/Explosion Hazard:THIS PRIMARY CELL IS NOT DESIGNED TO BE  
CHARGED OR RECHARGED. MAY CAUSE CELL TO LEAK OR EXPLODE.  
ENCAPSULATION (POTTING OF THESE CELLS) WILL NOT ALLOW FOR CELL  
EXPANSION, THAT CAN RESULT IN HIGH-PRESS

URE EXPLOSION FROM HEATING  
DUE TO INADVERTENT CHARGING OR HIGH TEMPERATURE ENVIRONMENTS  
(I.E.,IN EXCESS OF 100C).

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

Handling and Storage Precautions:STORAGE: STORE IN COOL PLACE. PREVENT  
CONDENSATION ON CELLS OR BATTERIES. ELEVATED TEMPERATURES CAN  
RESULT IN SHORTENED BATTERY LIFE. HANDLING:THIS CELL IS A PRIMARY  
CELL AND IS NOT DESIGNED TO BE CHA RGED OR RECHARGED. TO DO SO MAY  
CAUSE THE CELL TO LEAK O  
R EXPLODE. AVOID SHORT-CIRCUITING.

Other Precautions:IF SOLDERING OR WELDING TO THE TERMINALS OR CASE OF  
THE CELL (BATTERY) IS REQUIRED, EXERCISE PROPER PRECAUTIONS TO  
PREVENT DAMAGE TO CELL WHICH MAY RESULT IN LOSS OF CELL CAPACITY,  
SEAL, LEAKAGE, AND/ OR CELL EXPLOSION. DO NOT SOLDER TO CASE. CELLS  
SHOULD NOT BE SUBJECTED TO EXCESSIVE MECHANICAL SHOC K AND  
VIBRATION.

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

Work Hygienic Practices:JEWELRY, SUCH  
AS RINGS AND BRACELETS, SHOULD BE  
REMOVED OR INSULATED BEFORE HANDLING THE BATTERIES TO PREVENT  
INADVERTENT SHORT-CIRCUITING THROUGH CONTACT WITH THE BATTERY  
TERMINALS.

Supplemental Safety and Health  
PART NUMBER:3B24 -TC. BURNS TO THE SKIN MAY RESULT FROM THE HEAT  
GENERATED BY A SHORT-CIRCUIT.

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

HCC:Z6  
Appearance and Odor:CELL (BATTERY), 0.538" DIAMETER X 1.935" OR 1.990"  
LONG.

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

LITHIUM HAS VIGOROUS REACTION WITH WATER, FORMING A CAUSTIC HYDROXIDE.  
Stability Condition to Avoid:DO NOT ENCAPSULATE (POTTING OF THESE  
CELLS), AND DO NOT CHARGE OR RECHARGE THIS LITHIUM BATTERY.

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

Waste Disposal Methods:DO NOT INCINERATE OR SUBJECT CELLS TO  
TEMPERATURES IN EXCESS OF 212F (100C). SUCH ABUSE CAN RESULT IN  
LOSS OF SEAL, LEAKAGE, AND/OR CELL EXPLOSION. DISPOSE OF

IN  
ACCORDANCE WITH APPROPRIATE FEDERAL, S TATE, AND LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:BATTERIES SHOULD ALWAYS BE PACKAGED AND  
TRANSPORTED IN SUCH A MANNER AS TO PREVENT DIRECT CONTACT WITH EACH  
OTHER AND PREVENT INADVERTENT SHORT-CIRCUITING OF BATTERY  
TERMINALS.

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