

FEDERAL PRISON INDUSTRIES INC -- BA5374/U -- 6135-01-455-9646

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

Product ID:BA5374/U
MSDS Date:04/26/1999
FSC:6135
NIIN:01-455-9646
Status Code:A
MSDS Number: CKZCF
=== Responsible Party ===
Company Name:FEDERAL PRISON INDUSTRIES INC
Address:4 MILES E OF FAIRTON ON HWY 698
Box:99
City:FAIRTON
State:NJ
ZIP:08094
Country:US
Info Phone Num:609-453-1177, X4175
Emergency
Phone Num:856-453-4175/4179
Preparer's Name:JOHN F. WATSON, JR.
CAGE:0GVJ8

=== Contractor Identification ===

Company Name:UNICOR - FEDERAL PRISON INDUSTRIES INC
Address:4 MILES E OF FAIRTON ON HWY 698
Box:99
City:FAIRTON
State:NJ
ZIP:08094
Country:US
Phone:856-453-1177/ 4175/ 4179
CAGE:0GVJ8

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

Ingred Name:LITHIUM
CAS:7439-93-2
RTECS #:OJ5540000
= Wt:2.8

Ingred Name:MANGANESE DIOXIDE
CAS:1313-13-9
RTECS #:OP0350000
= Wt:3.5
OS

HA PEL:C 5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:GRAPHITE
CAS:7782-42-5
RTECS #:MD9659600
= Wt:3.5
OSHA PEL:10 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:PROPYLENE CARBONATE
CAS:108-32-7
RTECS #:FF9650000
= Wt:6.

Ingred Name:DIMETHOXYMETHANOL
CAS:646-06-0
RTECS #:JH6760000
= Wt:1.5
Other REC Limits:3 MG/M3

Ingred Name:LITHIUM PERCHLORATE
CAS:7791-03-9
= Wt:.3

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Car

cinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:RISK OCCURS IF BATTERY IS MISUSED,
CELL VENTS OR IS OPENED. ACUTE: ELECTROLYTE IS AN IRRITANT, INTACT
LITHIUM IS REACTIVE WITH MOISTURE OR WATER WHEN BATTERIES ARE
DAMAGED DUE TO MISUSE. CHRONIC: MA Y CAUSE DERMATITIS. SOME
COMPONENTS HAVE BEEN SHOWN TO BE TERATOGENIC TO ANIMALS. AVOID
DIRECT CONTACT.

Effects of Overexposure:EXPOSURE TO SKIN OR EYES MAY CAUSE IRRITATION.
INHALATION MAY RESULT IN
DIFFICULTY BREATHING.

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

First Aid:EYE & SKIN: FLUSH WITH WATER FOR 15 MINUTES. SEEK MEDICAL
ATTENTION. INHALATION: REMOVE TO FRESH AIR. SEEK MEDICAL
ATTENTION.

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

Extinguishing Media:LITH-X, DRY SAND, DRY GRAPHITE POWDER, COVER
COMPLETELY

Fire Fighting Procedures:ALLOW BATTERY TO COOL WHILE COVERED WITH
EXTINGUISHING MEDIA, REMOVE ADJACENT COMB

USTIBLE MATERIALS IF SAFE
TO DO SO, SCBA REQUIRED.

Unusual Fire/Explosion Hazard:DO NOT USE WATER TO EXTINGUISH FIRES,
CELLS CAN REACT WITH WATER VIOLENTLY. CELLS CAN VENT ELECTROLYTE
IF SUBJECTED TO EXTREME HIGH TEMPERATURES. HEATING ABOVE 354 F
WILL LEAD TO MELTING OF LITHIUM AND REPRESENTS A SEVERE FIRE AND
EXPLOSION HAZARD.

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

Spill Release Procedures:ALLOW BATTERY TO COOL AND VAPOR TO DISSIPATE.
AV
OID CONTACT. AVOID INHALATION OF VAPORS. REMOVE SPILLED
ELECTROLYTE WITH ABSORBENT MATERIAL. WEAR FULL FACE ORGANIC
RESPIRATOR.

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

Handling and Storage Precautions:BATTERIES MAY EXPLODE, IGNITE, OR VENT
ELECTROLYTE IF CRUSHED, OPENED, PUNCTURED, OR EXPOSED TO EXTREME
TEMPERATURES. DO NOT SHORT CIRCUIT, INSTALL WITH INCORRECT
POLARITY, OR ATTEMPT TO RECHARGE. D O NOT INCINERATE.

===== Exposure Co
ntrols/Personal Protection =====

Respiratory Protection:USE FULL-FACE ORGANIC VAPOR RESPIRATOR IF CELL
VENTS.

Ventilation:PROVIDE IF CELLS VENT.

Protective Gloves:NATURAL OR BUTYL RUBBER GLOVES.

Eye Protection:CHEMICAL GOGGLES.

Other Protective Equipment:USE ENCAPSULATING SUIT IF FIRE OCCURS.

Work Hygienic Practices:AVOID EXPOSURE. WASH HANDS AFTER HANDLING.

Supplemental Safety and Health

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

Boiling Pt:B.P. Text:P

C: 242 DME: 85

Melt/Freeze Pt:M.P/F.P Text:NOT DETERMINED

Vapor Pres:PC: 0.03 DME: 61

Vapor Density:3.1

Spec Gravity:MNO2: 4.9 GR: 2.4

Evaporation Rate & Reference:DME: 4.99

Solubility in Water:PC:MODERATELY SOLUBLE

Appearance and Odor:PC IS ODORLESS AND A COLORLESS LIQUID. LI IS A
SOFT, SILVERY METAL.

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

Stability Indicator/Materials to Avoid:YES

DO NOT EXPOSE DAMAGED BATTERIES TO WATER.

Stability Condition to Avoid

:EXPOSURE TO AVOID: EXPOSURE TO EXTREME
HIGH TEMPERATURES, DISASSEMBLE, RECHARGE OR SHORTING.
Hazardous Decomposition Products:MAY INCLUDE CARBON MONOXIDE AND
CAUSTIC LITHIUM OXIDE.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND
FEDERAL REGULATIONS. BATTERY IS NOT HAZARDOUS WASTE UNDER FEDERAL
RCRA REGULATIONS. BATTERY IS HAZARDOUS WASTE IN STATES WHICH USE
TECHNIQUES TO CHARACTERI
ZE THE WASTE STREAM.

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

Transport Information:THIS BATTERY CONTAINS