

DURACELL INC TECHNICAL SALES AND MARKETING GROUP -- DURACELL LITHIUM MANGANESE DIOXIDE BATTERIES -- 6135-01-383-0151

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

Product ID:DURACELL LITHIUM MANGANESE DIOXIDE BATTERIES

MSDS Date:11/02/1993

FSC:6135

NIIN:01-383-0151

Status Code:A

MSDS Number: CJSMJ

=== Responsible Party ===

Company Name:DURACELL INC TECHNICAL SALES AND MARKETING GROUP

Address:BERKSHIRE CORP

ORATE PARK

City:BETHEL

State:CT

ZIP:06801

Country:US

Info Phone Num:203-796-4000

Emergency Phone Num:301-590-9781

CAGE:90303

=== Contractor Identification ===

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

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

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9

RTECS #:OP0350000

Minumum % Wt:65.

Maxumum % Wt:70.

OS

HA PEL:C5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:1,2-DIMETHOXYETHANE
CAS:110-71-4
RTECS #:KI1451000
Minumum % Wt:10.
Maxumum % Wt:15.

Ingred Name:LITHIUM
CAS:7439-93-2
RTECS #:OJ5540000
Minumum % Wt:5.
Maxumum % Wt:10.

Ingred Name:PROPYLENE CARBONATE
CAS:108-32-7
RTECS #:FF9650000
Minumum % Wt:1.
Maxumum % Wt:5.

Ingred Name:ETHYLENE CARBONATE
CAS:96-49-1
RTECS #:FF9550000
Minumum % Wt:1.
Maxumum % Wt:5.

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
Minumum % Wt:1.
Maxumum % Wt:5.
OS
HA PEL:3.5 MG/M3
ACGIH TLV:3.5 MG/M3

Ingred Name:LITHIUM TRIFLUOROMETHANESULFONATE
CAS:33454-82-9
Minumum % Wt:1.
Maxumum % Wt:5.

Ingred Name:TEFLON
CAS:9002-84-0
RTECS #:KX4025000
= Wt:2.

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

Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO
Health Hazards Acute and Chronic:THESE CHEMS & METALS ARE CONTAINED IN
SEALED CAN.FOR CONSUMER USE,ADEQUATE HAZ WARNINGS ARE INCLUDED ON
BOTH PKG & ON BATT.POTENTIAL FOR EXPO S

HOULD NOT EXIST UNLESS BATT

LEAKS,IS EXPO TO HIGH TEMP OR MECHANICALLY,PHYSICALLY,ELECTRICALLY ABUSED.INHAL:NOT ANTICIPATED.RESP(&EYE)IRRIT MAY OCCUR IF FUMES RELEASED DUE TO HEAT/ABUNDANCE OF LEAK BATT.INGEST:IRRIT TO INTERNAL/EXTERNAL MOUTH AREA.SKIN:CONT ACT-IRRIT MAYOCCUR FOLLOWING EXPO TO LEAK BATT.ABSORPT-NOT ANTICIPATED. EYE-IRRIT MAY OCUR FOLLOWING EXP TO LEAK BATT.OTHER:NA.

Effects of Overexposure:CHEMS/METALS IN SEALED CAN.FOR CONSUMER USE,ADEQUATE HAZ WARN

INGS ARE INCLUDED ON BOTH PKG & BATT.POTENTIAL FOR EXPO SHOULD NOT EXIST UNLESS BATT LEAKS,IS EXPO TO HIGH TEMP OR IS MECHANICALLY,PHY,ELEC TR ABUSED.INHAL:RESP/EYE IRRIT.INGEST:IRRIT TO INTERNAL/EXTERNAL MOUTH AREA.SKIN:IRRIT.EYE:IRRIT.

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

First Aid:EYE-NOT ANTICIPATED.BATT LEAKING,MATL CONTACCT EYES FLUSH W/COPIOUS AMTS OF CLEAR TEPID H2O FOR 30MINS.CONTACT DR @ONCE.SKIN:NOT ANTICIPATED.BATT LEAKING IRRIGATE EXPO SKIN W/COPIOUS AMTS OF CLEAR TEP ID H2O FOR @LEAST 15MINS.IRRIT/INJURY/PAIN PERSISTS CONSULT DR. INHAL:NOT ANTICIPATED.BATT LEAKING CONTENTS MAY IRRIT RESP PASSAGES.REMOVE TO FRESH AIR.CONTACT DR IF IRRIT PERSISTS.INGEST:NOT ANTICIPATED.RINSE MOUTH/SURROUNDING AREA W/ CLEAR TEPID H2O FOR @LEAST 15MINS.CONSULT DR IMMED FOR TREATMENT & TO RULE OUT INVOLVEMENT OF ESOPHAGUS & OTHER TISSUES.(SEE OTHER)

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

Flash Point Method:CC
Flash Point:=6.C, 42.8F
1,2-DIMETH=14%

Extinguishing Media:WATER

Fire Fighting Procedures:COOL FIRE-EXPOSED BATTERIES AND ADJACENT STRUCTURES WITH WATER SPRAY FROM A DISTANCE. USE SCBA AND FULL PROTECTIVE GEAR.

Unusual Fire/Explosion Hazard:BATTERIES MAY BURST AND RELEASE HAZARDOUS DECOMPOSITION PRODUCTS WHEN EXPOSED TO A FIRE SITUATION. SEE REACTIVITY SECTION.

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

Spill Release Pr

cedures:NOTIFY SAFETY PERSONNEL OF LARGE
SPILLS.EVACUATE AREA & ALLOW VAPORS TO DISSIPATE.INCR
VENTILATION.AVOID EYE/SKIN CONTACT.DONT INHAL VAPORS.CLEANUP
PERSONNEL SHOULD WEAR APPROPRIATE PROTECTIVE GEAR.RE MOVE SPILLED
LIQUID W/ABSORBENT & CONTAIN FOR DISPOSAL.

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

Handling and Storage Precautions:STORE @RM TEMP.AVOID
MECHANICAL/ELECTRICAL ABUSE.DONT SHORT OR INSTALL INCORRECTLY. BATT
MAY EXPLO/PYROLIZE
/VENT IF DISASSEMBLE,CRUSH,RECHARGE,EXPO TO HIGH
TEMPS.INSTALL BATT IAW EQPMT INSTRUCT.DONT M IX BATT SYST(LIKE
ALKALINE & ZINC CARBON)IN SAME EQPMT. REPLACE ALL BATT IN EQPMT.
Other Precautions:NORMAL CLEANUP:NOT APPLICABLE.KEEP BATTERIES AWAY
FROM SMALL CHILDREN.WARNING SIGNALS: NOT APPLICABLE.

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

Respiratory Protection:NONE UNDER NORMAL USE CONDITIONS.
Ventilation:GENERAL VENTILATION UNDER NORMAL USE CONDITIONS.
Pr
otective Gloves:NONE UNDER NORMAL USE CONDITIONS.USE BUTYL GLOVES
WHEN HNDLG LEAKING BATT.
Eye Protection:NONE UNDER NORMAL USE CONDITIONS.WEAR SAF GLASSES WHEN
HNDLG LEAKING BATT.
Supplemental Safety and Health

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

HCC:Z6
Evaporation Rate & Reference:N/A (ETHER=1)
Appearance and Odor:SMALL CYLINDRICAL BATTERIES. CONTENTS DARK IN
COLOR.

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

Stabilit
y Indicator/Materials to Avoid:YES
CONTENTS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS.
Stability Condition to Avoid:DO NOT HEAT, CRUSH, DISASSEMBLE, SHORT
CIRCUIT OR RECHARGE.
Hazardous Decomposition Products:THERMAL DEGRADATION MAY PRODUCE HAZ
FUMES OF MANGANESE AND LITHIUM;HYDROFLUORIC ACID; OXIDES OF CARBON
AND SULFUR AND OTHER TOXIC BY-PRODUCTS.

===== Toxicological Information =====

Toxicological Information:8HR TWA:MANGANESE DIOXIDE(AS
MN)-5MG/

M3(CEILING)(OSHA);0.2MG/M3(ACGIH/DURACELL).1,2-DIMETHOXYETHANE 0.15PPM(DURACELL).CARBON BLACK 3.5MG/M3(OSHA/ACGIH).LITHIUM TRIFLUOROMETHANE SULFONATE 0.1MG/M3(3M R ECOMMENDATION).THESE LEVELS ARE NOT ANTICIPATED UNDER NORMAL CONSUMER USE CONDITIONS.

===== Ecological Information =====

Ecological:THESE BATTERIES PASS THE US EPAS TOXICITY CHARACTERISTIC LEACHING PROCEDURE AND THEREFORE MAY BE DISPOSED OF WITH NORMAL WASTE.ALL INGREDIENTS LISTED IN TSCA INVENTORY.

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

Waste Disposal Methods:NO SPECIAL PRECAUTIONS ARE REQUIRED FOR SMALL QUANTITIES.LARGE QUANTITIES OF OPN BATT SHOULD BE TREATED AS HAZ WASTE.DISPOS OF IAW FED/STATE/LOC REGULATIONS.DONT INCINERATE, SINCE BATT MAY EXPLODE @EX CESSIVE TEMPERATURES.THESE BATT PASS US EPA TOXICITY CHARACTERISTIC LEACHING PROCEDURES & THEREFORE MAY BE DISPO OF W/NORMAL WASTE.

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

Transport Information:DOT HAZARD CLASS:NOT APPLICABLE. DOT SHIPPING NAME:NOT APPLICABLE.

===== Regulatory Information =====

Federal Regulatory Information:ALL INGREDIENTS LISTED IN TSCA INVENTORY.

===== Other Information =====

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