View NSN Online: https://aerobasegroup.com/nsn/6135-01-383-0151

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 COR PORATE 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

Ingred Name:MANGANESE DIOXIDE CAS:1313-13-9 RTECS #:OP0350000 Minumum % Wt:65. Maxumum % Wt:70. O SHA 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. O SHA 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.

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 SHOULD 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 WAR NINGS 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: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 IR RIGATE 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 ANTICIPA TED.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)

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.

Spill Release P

rocedures: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 Precautions:STORE @RM TEMP.AVOID MECHANICAL/ELECTRICAL ABUSE.DONT SHORT OR INSTALL INCORRECTLY. BATT MAY EXPLO/PYROLIZ E/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.
======================================
Respiratory Protection:NONE UNDER NORMAL USE CONDITIONS. Ventilation:GENERAL VENTILATION UNDER NORMAL USE CONDITIONS. P
rotective 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
======================================
HCC:Z6 Evaporation Rate & amp; Reference:N/A (ETHER=1) Appearance and Odor:SMALL CYLINDRICAL BATTERIES. CONTENTS DARK IN COLOR.
======================================
 Stabili ty 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:8HR TWA:MANGANESE DIOXIDE(AS MN)-5MG

/M3(CEILING)(OSHA);0.2MG/M3(ACGIH/DURACELL).1,2-DIMETHOXYETH ANE 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:THESE BATTERIES PASS THE US EPAS TOXICITY CHARACTERISTIC LEACHING PROCEDURE AND THEREFORE MAY BE DISPOSED OF WITH NORMAL WASTE.ALL INGREDIENTS LIS TED IN TSCA INVENTORY.

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.

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

Federal Regulatory Information: ALL INGREDIENTS LISTED IN TSCA INVENTORY.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of De

fense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.