

DURACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY) -- 123A LITHIUM/MANGANESE DIOXIDE BATTERY -- 6135-01-351-1131

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

Product ID:123A LITHIUM/MANGANESE DIOXIDE BATTERY

MSDS Date:11/02/1993

FSC:6135

NIIN:01-351-1131

MSDS Number: BSDTV

=== Responsible Party ===

Company Name:DURACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY)

Address:305 NEW HIGHWAY 64 EAST

City:LEXINGTON

Stat

e:NC

ZIP:27292-2037

Country:US

Info Phone Num:203-796-4575/203-796-4682

Emergency Phone Num:203-796-4575BLAKE/203-796-4682MASCH

CAGE:2A917

=== Contractor Identification ===

Company Name:BATTERY OUTLET INC

Address:1608 CAMPOSTELLA RD

Box:City:CHESAPEAKE

State:VA

ZIP:23324

Country:US

Phone:757-545-4442

CAGE:0FGN2

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

Company Name:DU

RACELL USA (ALIAS BATTERY TECHNOLOGY COMPANY)

Address:305 NEW HIGHWAY 64 EAST

Box:City:LEXINGTON

State:NC

ZIP:27292-2037

Country:US

Phone:617-449-7600

CAGE:2A917

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

Ingred Name:LITHIUM

CAS:7439-93-2

RTECS #:OJ5540000

Fraction by Wt: 0.5% G

Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9

RTECS #:OP0350000

Fraction by Wt: 5.6% G

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG MN/M3 CEILING

ACGIH TLV:

5 MG MN/M3

Ingred Name:CARBON BLACK

CAS:1333-86-4

RTECS #:FF5800000

Fraction by Wt: 0.4% G

Other REC Limits:NONE RECOMMENDED

OSHA PEL:3.5 MG/M3

ACGIH TLV:3.5 MG/M3; 9596

Ingred Name:TEFLON

Fraction by Wt: 0.2% G

Other REC Limits:NONE RECOMMENDED

Ingred Name:PROPYLENE CARBONATE (PC)

CAS:108-32-7

RTECS #:FF9650000

Fraction by Wt: 0.25% G

Other REC Limits:NONE RECOMMENDED

Ingred Name:ETHYLENE CARBONATE (EC)

CAS:96-49-1

RTECS #:FF9550000

Fraction by Wt: 0.25% G

Other REC Limits:NONE RECOMMENDED

Ingred Name: DIMETHOXY ETHER (DME)
Fraction by Wt: 1.2% G
Other REC Limits: NONE RECOMMENDED

Ingred Name: LITHIUM TRIFLUOROMETHANE SULFONATE (LITFS)
CAS: 33454-82-9
Fraction by Wt: 0.1% G
Other REC Limits: NONE RECOMMENDED

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

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation: YES Skin: YES Ingestion: YES
Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO
Health Hazards Acute and Chronic: CHEMS CONTAINED
IN SEALED CAN. RISK OF
EXPO OCCURS ONLY IF BATT MECHANICALLY/ELECTRICALLY ABUSED. MOST
LIKELY RISK IS ACUTE EXPO WHEN CELL VENTS. PC MILDLY IRRIT UPON
EYE/SKIN CONTACT. DME BELIEVED TO BE SLIGHTLY TO MODERATELY
TOXIC. CONTACT OF ELECTROLYTE/EXTRUDED LITHIUM W/SKIN/EYES SHOULD BE
AVOIDED. INHAL/INGEST (SUPPLE)
Explanation of Carcinogenicity: PER
MSDS: CARCINOGENICITY: NTP/IARC/OSHA: NO.
Effects of Overexposure: IRRIT OF SKIN OR EYES. LITHIUM CAN CAUSE
THERMAL & CHEMICAL BURNS UPON
CONTACT W/SKIN. DME MAY BE
REPRODUCTIVE HAZARD.
Medical Cond Aggravated by Exposure: AN ACUTE EXPOSURE WILL NOT
GENERALLY AGGRAVATE ANY MEDICAL CONDITION.

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

First Aid: IN CASE OF SKIN CONTACT W/CONTENTS OF BATT FLUSH IMMEDIATELY
W/WATER. FOR EYE CONTACT FLUSH W/COPIOUS AMTS OF WATER FOR 15 MINS.
DO NOT INHALE VENTED MATL. IF IRRIT PERSISTS GET MEDICAL HELP.

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

Flash Point: SUPPLEMENTAL
Autoignition Temp: Autoignition Temp Text: NP
Lower Limits: 2.3 PC
Upper Limits: NA
Extinguishing Media: WATER.
Fire Fighting Procedures: THE PREFERRED PROCEDURE IS TO RAPIDLY COOL
BATTERIES & ADJACENT STRUCTURES W/WATER. WHEN LARGE NUMBERS OF CELLS
ARE INVOLVED IN FIRE FIRE FIGHTERS SHOULD USE SCBA.
Unusual Fire/Explosion Hazard: CELLS CAN VENT WHEN SUBJ TO EXCESSIVE
HEAT. WHEN LARGE NUMBERS OF CELLS ARE INVOLVED IN FIRE, FIRE FIGHTERS
SHOULD USE SCBA.

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

Spill Release Procedures:THE PREFERRED RESPONSE IS TO LEAVE AREA & ALLOW BATT TO COOL/VAP TO DISSIPATE.AVOID SKIN/EYE CONTACT OR INHAL OF VAPORS. REMOVE SPILLED LIQ W/ABSORBENT & INCINERATE. PREFERABLY CLEAN UP CREW SHOULD WE AR FULL-FACE RESP(PARTICULATE/ORG VAP CARTRIDGE).

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID MECHANICAL,PHYSICAL,OR ELECTRICAL ABUSE.

Other Precautions:BATT MAY EXPLODE,PYROLIZE,OR VENT IF DISASSEMBLED,CRUSHED,RECHARGED OR EXPOSED TO FIRE OR HIGH TEMPERATURE. DO NOT SHORT OR INSTALL W/INCORRECT POLARITY.

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

Respiratory Protection:SCBA (FIRE); FULL-FACE RESPIRATOR W/PARTICULATE/ORGANIC CARTRIDGE (SPILL).

Ventilation:IN CASE OF VENTING, PROVIDE AS MUCH VENTILATION AS POSSIBLE.

Protective Gloves: BUTYL GLOVES.

Eye Protection:SAFETY GLASSES.

Other Protective Equipment:NONE.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

PHY/CHEM CHARA:BPT(C):EC 244;PC 242;DME 85;VAP PRESS@20C:EC 0.01;PC 0.03;DME 61;VAP DENS:EC 3.04;DME 3.1;SOLUBILITY:EC/PC MODERATELY;DME/LITFS COMPLETELY;SPEC GRAV:EC 1.322;PC 1.203;MNO2 5.03;LI 0.54 ;DME 0.868;LITFS 0.6;DME COLORLESSLIQ W/SWEET ODOR;FPT(C):EC 143(OC);PC 135(OC);DME 6(CC). HEALTH HAZ:OF LITFS

HARMFUL.

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

HCC:Z6

Boiling Pt:B.P. Text:SUPPLEMENT

Melt/Freeze Pt:=180.C, 356.F

M.P/F.P Text:180C LI

Decomp Temp:Decomp Text:NP

Vapor Pres:SUPPLEMENT

Vapor Density:SUPPLEMENT

Spec Gravity:SUPPLEMENT

pH:NP

Viscosity:NP

Evaporation Rate & Reference:DME 4.99(BUTYL ACETATE=1)

Solubility in Water:SUPPLEMENTAL

Appearance and Odor:PC/EC ODORLESS,COLORLESS LIQ;LI SOFT SILVERY METAL;MNO2/CARBON BLK POWDER(SUPPL

Percent Volatiles

by Volume:NP
Corrosion Rate:NP

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

Stability Indicator/Materials to Avoid:YES
NONE SPECIFIED BY MANUFACTURER.
Stability Condition to Avoid:DO NOT HEAT, DISASSEMBLE OR RECHARGE.
Hazardous Decomposition Products:NONE SPECIFIED BY MANUFACTURER.

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

Waste Disposal Methods:DISPOSE IAW APPROPRIATE REGULATIONS &
W/RECOMMENDATIONS IN DURACELL TECHNICAL BULLETIN. OPEN CE
LLS SHOULD
BE TREATED AS HAZARDOUS WASTE.

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