

NAVAL MINE WARFARE ENGINEERING ACTIVITY -- DISCHARGED BATTERY ALKALINE, MK141-0 --
6135-01-231-3991

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

Product ID:DISCHARGED BATTERY ALKALINE, MK141-0
MSDS Date:02/11/1991
FSC:6135
NIIN:01-231-3991
MSDS Number: BMDKW
=== Responsible Party ===
Company Name:NAVAL MINE WARFARE ENGINEERING ACTIVITY
Address:CODE 60 BUILDING 1959
City:YORKTOWN
State:VA
ZIP:23691-5076
Cou
ntry:US
Info Phone Num:804-887-4930
Emergency Phone Num:804-887-4930
Preparer's Name:ANN ALLEN
CAGE:30265
=== Contractor Identification ===
Company Name:HOECHST CELANESE CHEM GROUP
Box:City:DALLAS
State:TX
ZIP:75356-9320
Country:US
Phone:214-689-4000
CAGE:10001
Company Name:NAVAL MINE WARFARE ENGINEERING ACTIVITY
Address:CODE 60 BUILDING 1959
Box:City:YORKTOWN
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ZIP:23691-5076
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Phone:804-887-4930
CAGE:30265

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

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ingred Name:MERCURY
CAS:7439-97-6
RTECS #:OV4550000
Fraction by Wt: 0.01%
OSHA PEL:0.1 MG/M3, S, C
ACGIH TLV:0.05 MG/M3, S
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:MANGANESE
CAS:7439-96-5
RTECS #:OO9275000
Other REC Limits:1 MG/M3 FUME;3 STEL
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:POTASSIUM HYDROXIDE
CAS:1310-58-3
RTECS #:TT2100000
Fraction by Wt: 10%
OSHA PEL:2 MG/M3, C
ACGIH TLV:2 MG/M3, C
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE DIOXIDE

CAS:1313-13-9
RTECS #:OP0350000
Fraction by Wt: 10%
Other REC Limits:1 MG/M3 FUME;3 STEL
OSHA PEL:5 MG/M3 DUST, C (MN)
ACGIH TLV:5 MG/M3 (MN DUST)

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
OSHA PEL:3.5 MG/M3
ACGIH TLV:3.5 MG/M3

Ingred Name:GRAPHITE
CAS:7782-42-5
RTECS #:MD9659600
Fraction by Wt: 5%
Other REC Limits:15 MPPCF (MFR)
OSHA PEL:15 MPPCF RDUST
ACGIH TLV:2 MG/M3 RDUST; 9293

Ingred Name:ZINC OXIDE (MFR REC LIMITS: 5 MG/M3, C)
CAS:1314-13-2
RTECS #:ZH4810000
Other REC L

imits:5 MG/M3 FUME;10 STEL
OSHA PEL:15MG/M3 TDUST/5 FUME
ACGIH TLV:10MG/M3 TDUST; 9293

===== 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:MERCURY IS EXPERIMENTAL TERATOGEN & GI
& CNS POISON. MANGANESE IS AN EXPERIMENTAL TERATOGEN & MUTAGEN.
ZINC OXIDE IS A HUMAN PULMONARY DISEAS
E PRODUCER. IN FIRE
SITUATION, CELLS MAY RELEASE HAZ SUBSTA NCES. (ACUTE) INHAL: MAY
CAUSE IRRIT/METAL FUME FEVER IN FIRE SITUATION. INGEST: MATLS ARE
POISONOUS. (EFTS OF OVEREXP)
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:HLTH HAZ: SKIN/EYE: MATLS MAY CAUSE EYE & SKIN
IRRIT BY VAPOR/DIRECT CONT. (CHRONIC) NOT LIKELY UNDER NORMAL USE.
Medical Cond Aggravated by Exposure:RESPIRATORY INFECTIONS AND
DISEASES, SKIN DISORDERS.

===== Fir
st Aid Measures =====

First Aid:INHAL:REMOVE TO FRESH AIR, USE ARTF RESP IF NEEDED. CALL MD.
EYE:FLUSH FOR AT LEAST 15 MIN W/FRESH RUNNING WATER, OCCASNLY
LIFTING UPPER & LOWER LIDS. CALL MD. SKIN:THORO WASH AFFECTED AREA
UNTIL NO T TRACE OF MATL REMAINS. INGEST:NOT LIKELYUNDER NORMAL USE.
IF INGEST OCCURS, CALL MD IMMED. DRINK LRG QTY OF WATER. EXPOS IN
FIRE: REMOVE VICTIM FROM FIRE HAZ TO FRESH AIR. CALL MD.

===== Fire Fighting Measures
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Flash Point:NOT KNOWN
Extinguishing Media:IN BULK STORAGE USE CO*2, FOAM OR DRY POWDER. WATER
MAY CAUSE ELECTRICAL SHORTS.
Fire Fighting Procedures:WEAR NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP
. AVOID CONTACT WITH HAZARDOUS DECOMPOSITION PRODUCTS.
Unusual Fire/Explosion Hazard:CELLS MAY RUPTURE WHEN EXPOSED TO
EXCESSIVE HEAT.

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

Spill Release Procedures:BATTERIES ARE A DRY SOLID & CAN BE HANDL

ED

EASILY WITH SHOVELS OR SIMILAR EQUIPMENT. WHEN ACCUMULATING LRG QTYs OF UNDISCHARGED BATTERIES FOR DISP PACK IN NON-CONDUCTIVE INSULATING MATERIAL. AVOID HEAT & WATER. USE RUBBER GLOVES FOR (SUPP DATA)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:DO NOT STORE UNPACKAGED CELLS TOGETHER SO CONTACTS CAN TOUCH. THIS SITUATION WILL RESULT IN CELL SHORTING AND HEAT BUILD-UP.

Other Precautions:DO NOT CHARGE, OVERHEAT (GREATER THAN 160F), OR OPEN CELLS. AVOID CONTACT WITH WATER, SPARKS, AND OPEN FLAMES.

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

Respiratory Protection:NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN . NONE NEEDED UNDER NORMAL USE.

Ventilation:NONE NEEDED UNDER NORMAL USE.

Protective Gloves:NONE NEEDED UNDER NORMAL USE.

Eye Protection:NONE NEEDED UNDER NORMAL USE.

Other Protective Equipment:

NONE REQUIRED UNDER NORMAL USE.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

SPILL PROC: CLEANING UP SPILLS OR HANDLING INTERNAL PARTS OF CELLS. USE ADEQUATE VENTILATION AND AVOID CONTACT OF CELL INTERNAL COMPONENTS WITH SKIN OR EYES.

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

Boiling Pt:B.P. Text:>212F,>100C

Vapor Density:>1

Spec Gravity:>1

Evaporation Rate & Reference:+1 (NK)

Solubility in Water:NEGLIGIBLE

Appearance

and Odor:BLACK SOLID GRANULES WITH NO APPRECIABLE ODOR, ENCASED IN BATTERY ASSEMBLY.

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

Stability Indicator/Materials to Avoid:YES

KEEP AWAY FROM WATER.

Stability Condition to Avoid:EXCESSIVE HEAT AND FIRE (HEATING ABOVE 160F), CHARGING.

Hazardous Decomposition Products:IN A FIRE SITUATION, MERCURY VAPOR, MANGANESE, AND ZINC OXIDE FUMES MAY BE EMITTED.

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

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Waste Disposal Methods:DISCARD IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. DISPOSAL BY LANDFILL MAY BE PROHIBITED IN SOME AREAS.

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