

NAVAL MINE WARFARE ENGINEERING ACTIVITY -- DISCHARGED BATTERY MERCURY-ZINC, MK 95-8 -- 6135-01-244-2666

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

Product ID:DISCHARGED BATTERY MERCURY-ZINC, MK 95-8

MSDS Date:02/11/1991

FSC:6135

NIIN:01-244-2666

MSDS Number: BMDKX

=== Responsible Party ===

Company Name:NAVAL MINE WARFARE ENGINEERING ACTIVITY

Address:CODE 60 BUILDING 1959

City:YORKTOWN

State:VA

ZIP:23691-

5076

Country: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

State:VA

ZIP:23691-5076

Country:US

Phone:804-887-4930

CAGE:30265

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

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Ingred Name:MERCURY (SARA III)
CAS:7439-97-6
RTECS #:OV4550000
Fraction by Wt: 5%
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:MERCURIC OXIDE (SARA III)
CAS:21908-53-2
RTECS #:OW8750000
Fraction by Wt: 35%
OSHA PEL:0.1 MG HG/M3, S
ACGIH TLV:0.1 MG HG/M3, S

Ingred Name:POTASSIUM HYDROXIDE (SARA III)
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

In
gred Name:MANGANESE DIOXIDE
CAS:1313-13-9
RTECS #:OP0350000
Fraction by Wt: 30%
OSHA PEL:5 MG/M3 CEILING
ACGIH TLV:5 MG/M3 DUST/1 FUME

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:ZINC OXIDE
CAS:1314-13-2
RTECS #:ZH4810000
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: MN IS EXPERIMENTAL MUTAGEN. MN & HG
ARE EXPTL TERATOGENS. MERCURY IS A HUMAN GI TRACT & CNS POISON. IN
FIRE SITUATION, CELLS MAY RELEASE HAZ SUBS. ACUTE: INHAL: MAY CAUSE
IRRIT/METAL FUME FEVER IN A FIRE SITUATION. INGEST: INGS ARE
POISONOUS. SKIN: MATLS MAY CAUSE SKIN/EYE IRRIT BY VAPS/CONTACT.
CHRONIC: NONE EXPECTED.

Explanation of Carcinogenicity: NOT RELEVANT

Effects of Overexposure: HEADACHE, COUGH, CHEST TIGHTNESS, CHEMICAL
PNEUMONITIS, HAND AND LIP TREMORS, MEMORY LOSS, DEPRESSION.

Medical Cond Aggravated by Exposure: RESPIRATORY INFECTIONS AND
DISEASES.

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

First Aid: INHAL: REMOVE TO FRESH AIR, USE ARTF RESP IF NEEDED. SEEK MED
ATTN. EYES: FLUSH AT LEAST 15 MINS W/FRESH RUNNING WATER,
OCCASIONALLY LIFTING UPPER & LOWER LIDS. SEEK MED ATTN. SKIN:
THORO

WASH AFFECTED AREA UNTIL NO TRACE OF MATL REMAINS. SEEK MED ATTN
IF NEEDED. INGEST: NOT LIKELY UNDER NORMAL USE. IF INGEST OCCURS,
GET IMMED MED ATTN. DRINK LARGE QTYS OF WATER. EXPOS IN FIRE:
REMOVE (SUPP DATA)

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

Extinguishing Media: IN BULK STORAGE USE CO*2, FOAM OR DRY POWDER. WATER
MAY CAUSE ELECTRICAL SHORTS.

Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT

. AVOID INHAL AND CONTACT W/HAZARDOUS
DECOMPOSITION PRODUCTS.

Unusual Fire/Explosion Hazard: CELLS MAY RUPTURE WHEN EXPOS TO EXCESS
HEAT. MAY RELEASE HG VAPORS WHEN HEATED WHICH REACTS VIOLENTLY
W/CL, HYDROGEN PEROXIDE, MG, S, & HYDROCARBONS.

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

Spill Release Procedures: BATTERIES ARE DRY SOLID, CAN BE HANDLED EASILY
W/SHOVELS/SIMILAR EQUIP. WHEN ACCUM LGE QTYS OF UNDISCHARGED
BATTERIES FOR DISP PACK IN NON-CON

DUCT INSULATE MATL. BATTERIES
W/LEAKY CELLS SHLD BE PLACED IN STRONG FIBERBOARD BOX
W/VERMICULITE(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.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE
FOR EXPOSURE OF CONCERN .
Ventilation:MECHANICAL VENTILATION RECOMMENDED.
Protective Gloves:RUBBER GLOVES.
Eye Protection:CHEMICAL WORKERS GOGGLES .
Other Protective Equipment:NONE REQUIRED UNDER NORMAL USE.
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health
FIRST AID PROT: VICTIM FROM FIRE HAZARD AREA TO
FRESH AIR. SEEK MED
ATTN. SPILL PROC: TO ABSORB ELECTROLYTE. AVOID HEAT & WATER. USE
RUBBER GLOVES FOR CLEANING UP SPILLS OR HANDLING INTERNAL PARTS OF
CELLS. USE ADEQUATE VENTILATION & AVOIDCONTACT OF CELL INTERNAL
COMPONENTS WITH SKIN OR EYES.

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

Boiling Pt:B.P. Text:>212F,>100C
Vapor Pres:0.0002@25C
Vapor Density:>1
Spec Gravity:>1 (H*2O=1)
Evaporation Rate & Reference:+1 (BUAC=1)
Solubility in Water:NEGL
IGIBLE
Appearance and Odor:BLACK SOLID GRANULES, 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. AVOID CHLORINE, HYDROGEN PEROXIDE, SULFUR,
PHOSPHORUS, HYDROCARBONS, REDUCING AGENTS.
Stability Condition to Avoid:EXCESSIVE HEAT AND FIRE (HEATING ABOVE
160F), CHARGING.
Hazardous Decomposition Products:IN FIRE SITUATION, MERCURY VAPOR,
MANGANESE, C

O, NO*X, & ZINC OXIDE FUMES MAY BE EMITTED.

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

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

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