Product ID:M-21 ARTILLERY FLASH SIMULATOR MSDS Date:03/18/1994 FSC:1370 NIIN:01-128-0418 Status Code:A MSDS Number: CJWFL === Responsible Party === Company Name:NEW ENGLAND ORDNANCE Address:WHIPPLE RD Box:125 City:GUILD State:NH ZIP:03754-0125 Country:US Info Phone Num:603-863-7700 Emergen cy Phone Num:1-800-225-3924 Preparer's Name: RUSSELL MITCHELL CAGE:1EJ07 === Contractor Identification === Company Name:NEW ENGLAND ORDNANCE Address:WHIPPLE RD Box:125 City:GUILD State:NH ZIP:03754-0125 Country:US Phone:603-863-7700 CAGE:1EJ07

Ingred Name:BARIUM NITRATE CAS:10022-31-8 RTECS #:CQ9625000 OSHA PEL:.5 MG (BA)/M3 ACGIH TLV:.5 MG (BA)/M3

Ingred Name:POTASSIUM NITRATE CAS:7757-79-1 RTECS #:TT3700000

Ingred Name:ALU

MINUM CAS:7429-90-5 RTECS #:BD0330000 OSHA PEL:5 MG/M3 (RESP) ACGIH TLV:5 MG/M3 (RESP)

Ingred Name:CHARCOAL CAS:16291-96-6 RTECS #:FL7243500

Ingred Name:SULFUR CAS:7704-34-9 RTECS #:WS4250000

Health Hazards Acute and Chronic:THIS DEVICE IS A SEALED ARTICLE AND AS SUCH DOES NOT PRESENT A HEALTH HAZARD, EXCEPT WHEN IGNITED (SEE FIRE EXPLOSION HAZARD DATA).

======

First Aid:PREFERRED CLEAN UP METHOD SWEEPS MATERIAL WITH A NATURAL FIBER (NEW HAIR) OR NON-SPARKING METAL WIRE BRUSH INTO A METAL OR CONDUCTIVE DUST PAN THEN INTO A CONDUCTIVE OR METAL CONTAINER.

Autoignition Temp:=260.C, 500.F

Extinguishing Media:THESE UNITS CONTAIN BOTH FUEL AND OXYGEN SOURCE AND CANNOT BE EXTINGUISHED BY NORMAL MEANS. Fire Fighting Procedures:CLEAR IMMEDIATE AREA, CONTROL AND MINIMIZE

RESULTANT FIRES. COOLING ADJACENT AREAS MAY EFFECTIVELY REDUCE FIRE DAMAGE. EXPECT REPEATED SMALL CONCESSIVE EXPLOSIONS WHEN SHIPPING BOXES ARE INVOLVED.

Spill Release Procedures: BROKEN UNITS MAY SPILL PYROTECHNIC POWDER. MATERIAL SHOULD BE CLEANED UP AND INCINERATED OR BURNED REMOTELY. CLEAN UP EFFORT SHOULD IMPLEMENT ELECTROSTATIC ENERGY CONTROLS AND AVOID USE OF WATER A S A CLEANING AGENT. PYROT

## ECHNIC POWDERSSHOULD NOT BE VACUUMED EXCEPT THROUGH GROUNDED CONDUCTIVE HOSES AND BY EXPLOSION PROOF NEC CLASS II DIV. I APPROVED VACUUM SYSTEMS.

Handling and Storage Precautions:WARNING! EXPLOSIVE ARTICLE MUST BE STORED IN ACCORDANCE WITH 29CFR1910.109 OR MORE STRINGENT MILITARY REGULATION SUCH AS AMCR 385-100, AFR 127-100, DOD 4145.26M KEEP AWAY FROM HEAT, SPARKS, IMPACT FR ICTION, RF, EST.

\_\_\_\_\_

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

Supplemental Safety and Health

UNDER NORMAL HANDLING NO SPECIAL PROTECTION IS REQUIRED. DURING USE EAR PROTECTION AND ADEQUATE SHIELDING SHOULD PROTECT OPERATOR FROM EXPLOSIVE EFFECTS OF THIS ARTICLE WHILE IT FUNCTIONS.

HCC:E1

Appearance and Odor:APPROX 4" LONG (2" DIA) WHITE PLASTIC CYLINDER WITH SMALLER WHITE END CAP

======= Stability and React

Stability Condition to Avoid:THIS ARTICLE IS NOT REACTIVE AS A SEALED UNIT.

Waste Disposal Methods: WASTE MATERIALS SHOULD BE BURNED REMOTELY.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this infor mation 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.