

US ARMY ARMAMENT,MUNITIONS AND CHEM COMMAND CRDEC -- DS2,5 GALLON PAIL --  
6850-00-753-4870

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

Product ID:DS2,5 GALLON PAIL

MSDS Date:11/28/1989

FSC:6850

NIIN:00-753-4870

MSDS Number: BPHMT

=== Responsible Party ===

Company Name:US ARMY ARMAMENT,MUNITIONS AND CHEM COMMAND CRDEC

Address:ATTN:SMCCR-SFS,BLDG 5101

City:ABERDEEN PROVING GROUND,EA

State:MD

ZIP:21010-5423

C

Country:US

Info Phone Num:301-671-4411

Emergency Phone Num:301-671-4411 (NORMAL HRS)/278-5201

CAGE:LO885

=== Contractor Identification ===

Company Name:MILITARY SPECIFICATIONS PROMULGATED BY MILITARY

Address:DEPTS/AGENCIES UNDER AUTH OF DEF STD

Box:MANUAL

City:4120 3-M

Phone:804-279-4371 DSN 695-4371

CAGE:81349

Company Name:US ARMY ARMAMENT,MUNITIONS AND CHEM COMMAND,CRDEC

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Box:City:ABERDEEN PROVING GROUND

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ZIP:21010-5423

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Phone:301-671-4411

CAGE:LO885

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

Ingred Name:SODIUM HYDROXIDE

CAS:1310-73-2

RTECS #:WB4900000

Fraction by Wt: 2%

Other REC Limits:N/K

OSHA PEL:2 MG/M3

ACGIH TLV:C 2 MG/M3; 9293

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:DIETHYLENETRIAMINE

CAS:111-40-0

RTECS #:IE1225000

Fraction by Wt: 70%

Other REC Limits:N/K

OSHA PEL:1 PPM

ACGIH TLV:1 PPM SKIN

RTECS #:KL5775000  
Fraction by Wt: 28%  
Other REC Limits:N/K  
OSHA PEL:25 PPM SKIN  
ACGIH TLV:5 PPM SKIN

Ingrid Name:SPILL PROC:EFFECTIVE AGAINST COMPONENTS, LONG RUBBER GLOVES  
TO PROT ARMS, FULL LENGTH RUBBER APRON. AVOID CONT W/ LIQ/VAP.

RTECS #:9999999ZZ  
Other REC Limits:N/K  
OSHA PEL:N/K  
ACGIH TLV:N/K

Ingrid Name:WASTE DISP METHODS: DISP AT OVERSEAS MILITARY INSTALLATIONS  
MUST USE FACILITIES THAT OPERATE WITHIN LAWS OF HOST COUNTRY.

RTECS #:9999999ZZ  
Other REC Limits:N/K  
OSHA PEL:N/K

ACGIH TLV:N/K

Ingrid Name:RESP PROT:FACE PIECE POSITIVE PRESS, SUPPLIED-AIR RESP W/  
AUXILIARY SCBA. NOTE: MILITARY PERSONNEL IN TRAINING (SEE ING 7)

RTECS #:9999999ZZ  
Other REC Limits:N/K  
OSHA PEL:N/K  
ACGIH TLV:N/K

Ingrid Name:RESP PROT:SCENARIOS THE M9 OR M17 SERIES MASK IS  
ACCEPTABLE. CHANGE FILTER ELEMENTS & CANISTERS AFTER EACH USE WITH  
DS2.

RTECS #:9999999ZZ  
Other REC Limits:N/K  
OSHA PEL:N/K  
ACGIH TLV:N/K

Ingrid Name:OTHER PROT EQUIP: WILL USE STANDARD ISSUE EQUIPMENT DURING  
TRAINING OPERATIONS.

RTECS #:9999999ZZ  
Other REC Limits:N/K  
OSHA PEL:N/K  
ACGIH TLV:N/K

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

LD50 LC50 Mixture:N/K  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic: CORR TO SKIN, EYE, RESP/GASTRIC  
MUCOSA. EFFECTS DEPEND ON RTE, AMT, LENGTH OF EXPOS. CAN LEAD TO SEV  
BURNS & ESOPHAGEAL STRICTURE. RPTD SKIN/RESP EXPOS TO  
DIETHY

LENETRIAMINE CAN CAUSE SKIN SENSIT & ASTHMA.ET HYLENE GLYCOL  
MONOMETHYL ETHER:KNOWN TOCAUSE REPRO DISORDERS (MALE,DEVEL)(CAL  
PROP 65,1989),FEMALE (NIOSH),& LIVER DMG.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:EYES:CORROSIVE.POSSIBLE CORNEAL  
OPACIFICATION.SKIN:CORROSIVE,SEVERE BURNS.INGESTION:CORROSIVE TO  
GASTRIC MUCOSA.INHALATION:CORROSIVE TO RESPIRATORY MUCOSA.EXPOSURE  
TO HIGH VAPOR CONCENTRATIONS CAN CAU SE NAUSEA,VOMITING,RESPIRATORY  
IRRITATION.SUFFIC

IENT EXPOS TO ETHYLENE GLYCOL MONOMETHYL ETHER MAY  
CAUSE CNS DEPRESSION.

Medical Cond Aggravated by Exposure:N/K

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

First Aid:ALL CASES:SEEK IMMED MEDICAL ATTN.EYES:IMMED FLUSH W/ LRG  
AMTS OF WATER FOR AT LEAST 15 MIN.SKIN:FLUSH FROM SKIN W/ WATER  
UNTIL "SOAPINESS" IS NO LONGER PRESENT.INGEST:IF CONSCIOUS,GIVE AS  
MUCH MILK O R WATER AS POSSIBLE.DO NOT INDUCE VOMIT.SUPPORTIVE  
MEASURES MAY BE REQUIRED.INHAL:RE  
MOVE TO FRESH AIR.IF BRTHG  
STOPPED,GIVE ARTF RESP.IF BRTHG DFCLT,GIVE O\*2.ADDITIONAL  
SUPPORTIVE MEASURES MAY BE REQ.

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

Flash Point Method:CC

Flash Point:175F,80C

Lower Limits:N/K

Upper Limits:N/K

Extinguishing Media:CARBON DIOXIDE,ALCOHOL FOAM,WATER.

Fire Fighting Procedures:STANDARD TURNOUT GEAR WITH NIOSH/MSHA APPROVED  
SCBA .

Unusual Fire/Explosion Hazard:NEVER MIX OR STORE ACIDS,OXIDIZING  
AGENTS,SUPERTROPIC

AL BLEACH OR HIGH TEST HYPOCHLORITE TOGETHER WITH  
DS2;FIRE OR EXPLOSION MAY RESULT.

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

Spill Release Procedures:POROUS SURFACE:CLEAN & NEUT IMMED TO AVOID  
INDEFINITE HAZ.COVER SPILL W/ DRY SODIUM BISULFATE TO NEUT & ABSORB  
ON VERMICULITE,CLAY,ETC.PLACE IN EPOXY COATED DRUM W/ FULLY  
REMOVABLE HEAD.LABEL CORR IAW EPA & DOT REQ.PROVIDE ADEQ VENT &  
ELIM(SEE SUPP)

Neutralizing Agent:DRY SODIUM BISULFATE.

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

Handling and Storage Precautions:AVOID EXTREME TEMPERATURES (SUCH AS 160F,71C) DURING STORAGE.CORROSIVE.

Other Precautions:N/K

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

Respiratory Protection:TWA 5.2 MG/M3:NIOSH APPRVD FULL  
FACEPIECE PRESS DE MAND SCBA,NIOSH APPRVD FULL-(SEE ING 6)

Ventilation:LOCAL EXHAUST NECESSARY IF TLV (TWA) EXCEEDED.

Protective Gloves:BUTYL RUBBER

Eye Protection:CHEM SFTY GOGG

.SEV EXPOS:INCLUDE FSHLD.

Other Protective Equipment:CHEM-RESIST:HOODED CLTHG (OVERALLS,LONG  
SLEEVE JACKET OR 1-2 PIECE CHEM SPLASH SUIT) & BOOTS.MILITARY  
PERS:(SEE ING 8)

Work Hygienic Practices:CONTAMINATED CLOTHING AND SHOES SHOULD BE  
REMOVED IMMEDIATELY AND WASHED THOROUGHLY WITH WATER BEFORE REUSE.

Supplemental Safety and Health

SPEC GRAV:0.97-0.98,H\*2O=1.VISC:9.9 CST.MATLS TO

AVOID:MYLAR,ACRYLIC),PAINT,WOOL,LEATHER,OXIDIZING MATLS  
(SUPERTROPICAL BLEACH,HIGH TEST HYPOCHL

ORITE,ETC) & ACIDS.TLV:5.2

MG/M3 TWA (MFR).SPILL PROC:IG NIT SOURCES.DURING CLEANUP,WEAR FULL  
FACE RESP W/ ORGANIC VAP CARTRIDGE (SEE ING 4).ENTRY

RTE:INHAL/SKIN/INGEST .

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

Boiling Pt:B.P. Text:380F,193.3C

Melt/Freeze Pt:M.P/F.P Text:N/K

Decomp Temp:Decomp Text:N/K

Vapor Pres:N/K

Vapor Density:N/K

Spec Gravity:SEE SUPP DATA

Evaporation Rate & Reference:N/K

Solubility in Water:N/K

Appearance and Odor:CLEAR

AMBER SOLUTION WITH AMMONIA-LIKE ODOR.

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

SOME METALS (SUCH AS AL,CADMIUM,TIN & ZINC),SOME PLASTICS (SUCH AS  
LEXAN,CELLULOSE ACETATE,POLYVINYL CHLORIDE,(SEE SUPP)

Stability Condition to Avoid:DETERIORATES IN AIR.EXPOSURE OF 48 HOURS  
OR MORE TO OPEN AIR WILL RESULT IN FORMATION OF GELATIN-LIKE BODIES  
ON SURFACE.

Hazardous Decomposition Products:N/K

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

Waste Disposal Methods:DISP MUST BE IAW FED,STATE,& LOC  
REGS.COORDINATION W/ SUPPORTING INSTALLATION/MACOM ENVIRON  
COORDINATION PRIOR TO DISP REC TO DETERM APPROP DISP METH .MUST BE  
INCIN.NOT RCRA MATL IF NOT MIXED W/ WATER.EXCESS STOCK:COORDINATE  
W/ DRMO.(SEE ING 5)

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