Material Safety Data Sheet

Name A305-A993 AM382-AM990 PRIMACORD, DETONATING CO Company ENSIGN-BICKFORD

MSDS bzfbm FSC 1375

MSDS Safety Information

FSC: 1375

MSDS Date: 10/30/1995

MSDS Num: BZFBM LIIN: 00F048178

Product ID: A305-A993 AM382-AM990 PRIMACORD, DETONATING CORD, PRIMALINE

MFN: 01

Responsible Party

Cage: 96336

Name: ENSIGN-BICKFORD CO THE Address: 660 HOPMEADOW ST

Box: 427

City: SIMSBURY CT 06070-2420
Info Phone Number: 203-651-2626
Emergency Phone Number: 203-651-2626
Preparer's Name: EDWIN J ZALEWSKI

Review Ind: Y Published: Y

Preparer Co. when other than Responsible Party Co.

Cage: 96336

Name: ENSIGN-BICKFORD CO Address: 660 HOPMEADOW STREET

Box: 483

City: SIMSBURY CT 06070-0483

Contractor Summary

Cage: 96336

Name: ENSIGN-BICKFORD CO Address: 660 HOPMEADOW STREET

Box: 483

City: SIMSBURY CT 06070-0483

Phone: 1-801-798-8613

Ingredients

Cas: 38082-89-2 RTECS #: US7546500

 ${\tt Name: 2,6-PYRIDINEDIAMINE, 3,5-DINITRO-N,N'-BIS(2,4,6-TRINITROPHENYL)-, }$

2,6-BIS(PICRYLAMINO)-3,5-DINITROPYRIDINE, PYX, *96-1*

Cas: 1336-21-6 RTECS #: BQ9625000

Name: AMMONIUM HYDROXIDE, AQUA AMMONIA *96-1*

Other REC Limits: 25 PPM

ACGIH TLV: 25 PPM EPA Rpt Qty: 1000 LBS DOT Rpt Qty: 1000 LBS Cas: 9004-34-6
RTECS #: FJ5691460
Name: CELLULOSE
OSHA PEL: 5 MG/CUM

ACGIH TLV: 10 MG/CUM (DUST)

Cas: 126-73-8
RTECS #: TC7700000

Name: TRIBUTYL PHOSPHATE Other REC Limits: 0.2 PPM

OSHA PEL: 5 MG/CUM ACGIH TLV: 2.2 MG/CUM

Cas: 9002-88-4 RTECS #: TQ3325000

Name: POLYETHYLENE, POLYETHYLENE RESIN (HOMOPOLYMER); POLYWAX 1000

(CARCINOGEN

BY IARC GROUP 3) *96-2*

Name: COTTON

Name: POLYPROPYLENE

Name: WAX,

Cas: 78-11-5

RTECS #: RZ6200000

Name: PENTAERYTHRITOL TETRANITRATE

Cas: 121-82-4

RTECS #: XY9450000

Name: CYCLONITE; S-TRIAZINE; HEXAHYDRO 1,3,5-TRINITRO;

CYCLOTRIMETHYLENETRINITRAMINE (RDX)

ACGIH TLV: 1.5 MG/CUM (SKIN)

Cas: 2691-41-0 RTECS #: XF7450000

Name: CYCLOTETRAMETHYLENETETRANITRAMINE (HMX)

Health Hazards Data

Route Of Entry Inds - Inhalation: NO

Skin: NO Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO OSHA: NO

Effects of Exposure: EYES: IRRITATION. INHALATION: CARDIOVASCULAR COLLAPSE, NASAL ANDamp; RESPIRATORY IRRITATION. INGESTION:

POISONOUS, DEATH.

Explanation Of Carcinogenicity: NONE

Signs And Symptions Of Overexposure: IRRITATION, LOWER BLOOD PRESSURE, VASODILATOR, SPASMS.

First Aid: EYES: FLUSH W/RUNNING WATER FOR 15 MINS. SKIN: WASH THOROUGHLY W/SOAP ANDAMP; WATER. INHALATION: REMOVE TO FRESH AIR. GIVE CPR IF NEEDED. INGESTION: TREAT W/GASTRIC WASH. OBTAIN MEDICAL ATTENTION IN ALL CAS ES.

Handling and Disposal

- Spill Release Procedures: USE PROTECTIVE EQUIPMENT DURING CLEAN-UP.
 ISOLATE AREA. REMOVE IGNITION SOURCES. CAREFULLY COLLECT MATERIAL
 ANDamp; PLACE IN A CONDUCTIVE BAG. CONTAMINATION OF MATERIAL
 W/SAND, GRIT, DIRT WILL RENDER MATERI AL SENSITIVE TO DETONATION.
 (SEE SUPP)
- Waste Disposal Methods: EPA HAZARDOUS NUMBER: D003. DISPOSE OF IAW/FEDERAL, STATE ANDamp; LOCAL REGULATIONS. ENSURE THAT DETONATING CORD CONTAINS NO KNOTS/KINKS. KNOTS/KINKS IN CORD CAN CAUSE A DETONATION WHEN SUBJECT TO HEAT/FLAM E. DESTRUCTION: USE ONLY QUALIFIED PERSONNEL.
- Handling And Storage Precautions: STORE AWAY FROM SPARKS/OTHER IGNITION SOURCES. AVOID HEAT, SHOCK ANDAMP; IMPACT.

Fire and Explosion Hazard Information

Fire Fighting Procedures: APPLY WATER THROUGH A FIXED EXTINGUISHING SYSTEM (SPRINKLERS), PEOPLE NEED NOT BE PRESENT FOR SYSTEM TO OPERATE. DON'T FIGHT FIRES INVOLVING EXPLOSIVES.

Unusual Fire/Explosion Hazard: MAY DETONATE IF EXPOSED TO SHOCK, HEAT, IMPACT, SPARKS/FRICTION. AUTOIGNITION TEMP: 374F (PENTAERYTHRITOL TETRANITRATE).

Control Measures

Respiratory Protection: WEAR OSHA/NIOSH APPROVED DUST, MIST ANDamp; FUME FILTER RESPIRATOR.

Ventilation: REQUIRED IF USED IN UNDERGROUND MINES/SPECIAL TESTING IS TO BE PERFORMED INDOOR.

Protective Gloves: RUBBER/NEOPRENE

Eye Protection: SAFETY GLASSES

Supplemental Safety and Health: APPEARANCE CONT'D: CORE WILL CONTAIN 4 TO 400 GR/FT OF LISTED EXPLOSIVES. BRIGHTLY COLORED ROPE LIKE LINEAR PRODUCT W/JACKET OF BRAIDED PLASTIC YARN. SPILLS CONT'D: SEPARATE MATERIAL THAT ISN'T CONTAMINATED FROM CONTAMINATED MATERIAL. WET DOWN AND amp; CLEAN (LOOSE POWDER), USING A DAMP RAG/SPONGE. STORE IN SECURE AREA.

Physical/Chemical Properties

Solubility in Water: INSOLUBLE

Appearance and Odor: THE CORE OF HIGH EXPLOSIVE IS WRAPPED IN PLASTIC

YARN. (SEE SUPP)

Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: HEAT, SHOCK, FRICTION, IMPACT, STATIC

CHARGE, SPARKS AND OTHER IGNITION SOURCES.

Materials To Avoid: ACIDS, ALKALIS

Hazardous Decomposition Products: DETONATION AND BURNING: NITROGEN

OXIDES.

Hazardous Polymerization Indicator: NO

Toxicological Information

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

HAZCOM Label

Product ID: A305-A993 AM382-AM990 PRIMACORD, DETONATING CORD, PRIMALINE

Cage: 96336

Company Name: ENSIGN-BICKFORD CO Street: 660 HOPMEADOW STREET

PO Box: 483

City: SIMSBURY CT Zipcode: 06070-0483

Health Emergency Phone: 203-651-2626

Label Required IND: Y

Date Of Label Review: 12/16/1998

Status Code: C

Label Date: 12/16/1998 Origination Code: G

Hazard And Precautions: EYES: IRRITATION. INHALATION: CARDIOVASCULAR COLLAPSE, NASAL ANDamp; RESPIRATORY IRRITATION. INGESTION: POISONOUS,

DEATH. IRRITATION, LOWER BLOOD PRESSURE, VASODILATOR, SPASMS.

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