

GENERAL CHEMICAL -- LEAD FLUOBORATE -- 6810-00-663-2569

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

Product ID:LEAD FLUOBORATE

MSDS Date:09/01/1989

FSC:6810

NIIN:00-663-2569

MSDS Number: BFKFQ

=== Responsible Party ===

Company Name:GENERAL CHEMICAL

Address:90 E HALSEY RD

Box:395

City:PARSIPPANY

State:NJ

ZIP:07054

Country:US

Info Phone Num:201-455-5630

Emergency Phone Num:(201)455-3700

Preparer's Name:DIRE

CTOR ENVIRON.MATTERS

CAGE:0AU44

=== Contractor Identification ===

Company Name:GENERAL CHEMICAL CORPORATION

Address:90 EAST HALSEY ROAD

Box:City:PARSIPPANY

State:NJ

ZIP:07054

Country:US

Phone:973-515-1840

CAGE:0AU44

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

Ingred Name:LEAD FLUOBORATE (SARA III)

CAS:13814-96-5

RTECS #:ED2700000

Fraction by Wt: 50-52%

OSHA PEL:SEE 1910.1025

ACGIH TLV:0.15 MG PB/M3; 9192

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

Ingred Name:WATER

CAS:7

732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 48-50%

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

LD50 LC50 Mixture:LD50(ORAL RAT)=50MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Health Hazards Acute and Chronic:EXTENDED INH.OF MIST MAY CAUSE SOME OF THE CHRONC.SYMP.NOTED WITH PB FUMES&DUST:METALLIC TASTE,LOSS OF APETITE,INDIGESTION,NAUSEA,VOMIT,CONSTIPATN,ABD.CRAMPs,NERVOUS,INSON.MN.EXCESS LEAD ABS.MAY DAMAGE CNS,PNS & KIDNEY. CHRONIC EXPOSURE TO

FLUORIDES MAY DAMAGE KIDNEY,CAUSE FLUOROSIS.-CONTINUES ON SUPPL SFTY & HEALTH DATA-

Explanation of Carcinogenicity:COULD NOT BE CLASSIFIED AS TO ITS CARCINOGENITY TO HUMANS.

Effects of Overexposure:EYES:LIQ.CONTACT CAUSES SEVERE IRRIT,BURNS.MISTS WILL ALSO IRRIT. SKIN:LIQ.CONTACT CAUSES IRRIT,BURNS;INH:MIST INH.CAUSES HEADACHE,CRAMPs,PAIN IN LEGS,COMA;ING:METALLIC TASTE,ABD.PAIN,VOMIT,DIARRH,CONVULSIONS,COMA.\*FATAL DOSE(HUMAN) 0.5GM ABSORBED PB\*HYPOCALCEMIA,P

POSSIBLE SEVERE/FATAL MAY OCCUR DUE TO FLUORIDE CONTENT

Medical Cond Aggravated by Exposure:FETUS OF PREGNANT WOMEN WORKERS MAY BE AT INCREASED RISK DUE TO EXCESS EXPOSURE TO LEAD.

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

First Aid:EYES:FLUS IMM.FOR 20MIN W.LG AMTS OF WTR.SEEK MED ATTN;SKIN:PROMPTLY WASH W.SOAP&WTR.TREAT AS ACID BURN.REMOVE CONTAM.CLOTH.SEEK MED.ATTN;INH:REMOVE TO FRESH AIR.IF BREATHNG GIVE O\*2,IF NOT BREATHNG,G IVE CPR.SEEK MED.A

ATTN;ING:CALL DOCTOR AT ONCE.DO NOT INDUCE VOMIT.IF CONCIIOUS GIVE SEVERAL GLASSES MILK OR SEVERAL OUNCES MILK OF MAGNESIA,IF AVAIL;OTHERWISE GIVE LG QUANTITIES OF WTR&KEEP WARM&QUIET.

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

Extinguishing Media:CO\*2, FOAM, DRY CHEM.

Fire Fighting Procedures:WEAR CHEMICAL PROTECTIVE SUIT WITH SELF CONTD BRTHG APP.DO NOT USE WTR STRM DIRECTLY ON MTL ITSELF.USE WTR SPRAY TO ABSORB OR DISPERSE VAPORS.

Unusual Fire/Exp

losion Hazard:AVOID BREATHNG VAPS & FUMES FROM BURNING  
MATERIAL.AVOID BODILY CONTACT WITH MATERIAL. \*USE WATER SPRAY TO  
KEEP FIRE-EXPOSED CONTAINERS COOL\*

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

Spill Release Procedures:CONTAIN SPILL WITH INERT MATERIAL.USING  
CAUTION,FLUSH W.WTR TO DILUTE SPILL OR NEUTRALIZE IT WITH ALKALI  
SUCH AS SODIUM CARBONATE.KEEP OUT OF SEWER.MOP OR PUMP UP INTO  
SUITABLE CONTAINER,COVER & LABEL FOR STORAGE AND LATER DISPOS  
AL.

Neutralizing Agent:CAO;CA(OH)\*2;NAOH;NA\*2CO\*3

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

Handling and Storage Precautions:DO NOT GET IN EYES,SKIN OR CLOTH.AVOID  
BREATHING MIST,IF FORMED USE W.ADEQUATE VENTILATION AND DO NOT  
EAT,SMOKE WHILE HANDLING.

Other Precautions:STORE IN A DRY,WELL-VENTILATED AREA,OUT OF THE  
SUN,AWAY FROM HEAT & FOOD PRODUCTS. KEEP CONTAINERS TIGHTLY CLOSED  
AND PROTECT FROM PHYSICAL DAMAGE. PERIODICALLY INSPECT DRUM AND  
STO  
RAGE CONDITIONS.

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

Respiratory Protection:IF MISTY COND.PREVAIL&CONC.IS >TLV  
BUT50MG(PB)/CUM U SE NIOSH APPVD SCBA W.FULL  
FACEPIECE.

Ventilation:IF MISTY COND.PREVAIL,PROVIDE LOCAL EXHAUST VENTILATION.  
NATURAL VENTILATION IS NORM.ADEQUATE IN ABSENCE OF MISTY COND.

Protective Gloves:RUBBER

Eye Protection:CHEM.SFTY GOGGLES W.FULL-FACE PLSTC SHLD

Other Protective Equipment:NEUTRALIZING SUPPLIES&EQUIPM,IF CALLED FOR

BY PRE-PLANNED SPILL OR LEAK PROCEDURES.PROVIDE EYEWASH,SHOWER  
STATIONS.

Work Hygienic Practices:OBSERVE SCRUPULOUS PERS.HYGIENE&GOOD  
HOUSEKEEPNG PRACT.WASH THOROUGHLY AFTER HANDLING.REMOVE PROMPTLY  
ANY CONTAM.ITEMS.

Supplemental Safety and Health

CONT'D FROM HEALTH HAZARD:EXCESS EXPOSURE TO LEAD CAN IMPAIR THE  
FORMATION OF BLOOD CELLS;IN ADDITION,THE FETUS OF PREGNANT WOMEN  
WORKERS MAY BE AT INCREASED RISK,BECAUSE LEAD IS ABLE TO TRAVERSE  
THE PLACENTA BARRIER AND ENTER

# THE BLOOD STREAM OF THE FETUS.

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

HCC:T4

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

Spec Gravity:1.75

Solubility in Water:COMPLETE

Appearance and Odor:COLORLESS LIQUID. RELATIVELY NO ODOR.

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

Stability Indicator/Materials to Avoid:YES

CYANIDES,CALCIUM CARBIDE,FLUORINE,WATER-REACTIVE MATERIALS.

\*ALUMINUM:THIS SOLUTION IS CORROSIVE TO AL\*

Stability Condition to Avoid:EVA

PORATION TO DRYNESS WITH SUSTAINED

HEATING (AS IN AN ACCIDENTAL FIRE)

Hazardous Decomposition Products:HEATING SOLN TO OR ABOVE BOILING PT

GIVES OFF TOX MIST. HEATNG OF RESIDUE,IF EVAP.TO DRYNESS,MAY YIELD TOXIC GASES.

## ===== Disposal Considerations =====

Waste Disposal Methods:NEUTRALIZE W.CAUTION.DO NOT SEWER.DISPOSAL OF WASTE PB FLUOBORATE SOLN MAY BE SUBJECT TO FDL,STATE&LOCAL REGS.

USER SHOULD REVIEW OPNS IN TERMS OF APPLICABLE REGS,THEN

CONSULT

WITH APPROP.REGULATORY A GENCIES BEFORE DISCHARGING OR DISPOSINGOF WASTE.

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 information 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.