ASARCO LITHARGE MATERIAL SAFETY PAGE 1

DATA SHEET

A. GENERAL INFORMATION VWR #36720-067

TRADE NAME (COMMON NAME OR SYNONYM) ASARCO PRODUCT CODE #

LITHARGE, LEAD MONOXIDE 60-50-000 TO 60-50-020

CHEMICAL NAME FORMULA MOLECULAR WEIGHT

LEAD MONOXIDE PBO 223.2

PBO 223.19

ADDRESS

ASARCO

180 MAIDEN LANE

NEW YORK, NEW YORK 10038 PHONE: 212-510-2000

CONTACT PHONE NUMBER ISSUED DATE REVISED DATE D

GENERAL INFORMATION - 8/4/83 6/7/93

DEPARTMENT OF ENVIRONMENTAL SCIENCES DAY 801-262-2459

NIGHT 801-561-3044

FIRST AID INFORMATION - (MEDICAL DEPT.) DAY 415-457-0383

TRANSPORTATION EMERGENCIES - CHEMTREC 800-424-9300

MATERIAL OR COMPONENT

C.A.S.# WT.% PERMISSIBLE AIR

CONCENTRATION

LEAD MONOXIDE

1317-36-8 99.7+ 0.05 MG/CU.M.(OSHA)

X OSHA ACGIH

0.15 AS PB (ACGIH)

SARA TITLE III SECT. 313 CHEM - YES

C. HEALTH HAZARD INFORMATION

PRIMARY ROUTE OF ENTRY:

CARCINOGENICITY:

INGESTION, INHALATION

IARC CLASSIFIES LEAD AND SOME LEAD COMPOUNDS

AS 2B CARCINOGENS (POSSIBLY CARCINOGENIC TO

HUMANS.)

ACUTE OVEREXPOSURE (SYPMTOMS AND EFFECTS): EXTREMELY HIGH DOSES OF LEAD MAY

CAUSE ENCEPHALOPATHY, A BRAIN CONDITION THAT CAN RESULT IN SEZUIRES, COMA, AND

DEATH. IT SHOULD BE RECOGNOIZED, HOWEVER, THAT EXPOSURES OF THIS MAGNITUDE IN

AN INDUSTRIAL ENVIRONMENT ARE EXTREMELY UNLIKELY.

CHRONIC OVEREXPOSURE (SYPMTOMS AND EFFECTS): CHRONIC OVEREXPOSURE MAY CAUSE

DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS, KIDNEYS, AND LIVER, DAMAGE TO THE REPRODUCTIVE SYSTEMS, A DECREASE IN FETILITITY IN MEN AND WOMEN, AND DAMAGE TO THE FETUS OF A PREGNANT WOMAN. SYMPTOMS INCLUDE LOSS OF SLEEP, LOSS OF APPETITE, METALLIC TASTE, AND TIREDNESS.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED: DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS, KIDNEYS, NERVOUS AND POSSIBLY REPRODUCTIVE SYSTEMS.

D. FIRST AID MEASURES

INHALATION: REMOVE FROM EXPOSURE; PLACE INDIVIDUAL UNDER CARE OF A PHYSICIAN.

INGESTION: INDUCE VOMITING IN CONSCIOUS INDIVIDUAL AND CALL A PHYSICIAN.

SKIN OR EYES: FLUSH W/ PLENTY OF WATER. IF SYMPTOMS DEVELOP, CALL A PHYSICIAN.

E. FIRE AND EXPLOSION

FLASH POINT AUTO IGNITION TEMPERATURE FLAMMABLE LIMITS IN AIR(BY %VOL)

NA NA NA

UNUSUAL FIRE & EXPLOSION HAZARDS FIRE EXTINGUISHING AGENTS RECOMMENDED

NA NO SPECIFIC AGENTS RECOMMENDED

FIRE EXTINGIUSHING AGENTS TO AVOID

NO SPECIFIC AGENTS

SPECIAL FIRE FIGHTING PRECAUTIONS

USE NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING IF INVOLVED IN FIRE.

F. PRECAUTIONS/PROCEDURES:

NORMAL HANDLING:

USE OF APPROVED RESPIRATORS IS REQUIRED FOR APPLICATIONS WHERE ADEQUATE VENTIL-ATION CANNOT BE PROVIDED. ACTIVITIES WHICH GENERATE DUST OR FUME SHOULD BE AVOIDED. WHEN MELTED, THE TEMPERATURE SHOULD BE KEPT AS LOW AS POSSIBLE.

ENGINEERING CONTROLS:

LOCAL EXHAUST VENTILATION IS RECOMMENDED FOR DUST AND/OR FUME GENERATING OPERATIONS WHERE AIRBORNE EXPOSURES MAY EXCEED PERMISSIBLE AIR CONCENTRATIONS.

SPILL OR LEAK:

ANY METHOD WHICH KEEPS DUST OT A MINIMUM IS ACCEPTABLE. VACUUMING IS PREFERRED FOR DUST. USE OF APPROVE RESPIRATORY PROTECTION IF POSSIBILITY OF DUST/FIRE EXPOSURE EXISTS. DO NOT USE COMPRESSED AIR FOR CLEANING.

STORAGE:

GENERAL STORAGE PROCEDURES ACCEPTABLE.

PERSONAL HYGIENE:

AVOID INHALATION OR INGESTION. PRACTICE GOOD HOUSEKEEPING AND PERSONAL HYGIENE PROCEDURES. NO TOBACCO OR FOOD IN WORL AREA. WASH THOROUGHLY BEFORE EATING OR SMOKING. SHOWER AND CHANGE CLOTHES AT THE END OF WORK SHIFT. DO NOT WEAR CONTAMINATED CLOTHING HOME. DO NOT BLOW DUST OFF CLOTHING WITH COMPRESSED AIR.

SPECIAL: PRECAUTIONS/PROCEDURES/LABEL INSTRUCTIONS:

WHERE AIRBORNE LEAD EXPOSURES MAY EXCEED THE OSHA ACTION LEVEL AND OR PEL,

REFER TO THE OSHA LEAD STANDARD 29CFR1910.1025

LABEL SIGNAL WORD:

WARNING

DOC 1 PAGE 2

G. PERSONAL PROTECTIVE EQUIPMENT:

RESIPATORY PROTECTION:

WHERE AIRBORNE EXPOSURES MAY EXCEED OSHA/ACGIH PERMISSIBLE AIR CONCENTRATIONS,

THE MINIMUM RESPIRATORY PROTECTION RECOMMENDED IS A NEGATIVE PRESSURE AIR

PURIFYING RESPIRATOR WITH CARTRIDGES THAT ARE NIOSH/MSHA APPROVED AGAINST DUST,

FUMES, AND MISTS HAVING A TWA OF LESS THAN 0.05MG/CU.M.

EYES AND FACE:

SAFETY GLASSES RECOMMENDED WHERE THE POSSIBILITY OF GETTING DUST PARTICLES IN EYES EXIST.

OTHER CLOTHING AND EQUIPMENT:

FULL PROTECTIVE CLOTHING IS RECOMMENDED FOR EXPOSURES THAT EXCEED PERMISSIBLE

AIR CONCENTRATIONS. ALL CONTAMINATED CLOTHING SHOULD BE REMOVED BEFORE LEAVING

PLANT PREMISES.

```
MATERIAL IS (AT NORMAL CONDITIONS):
  SOLID
APPEARANCE & ODOR:
  YELLOW-ORANGE POWDER, ODORLESS
MELTING POINT (DEGREES C):
  886
BOILING POINT (DEGREES C):
  NOT AVAILABLE
SPECIFIC GRAVITY (H20=1):
  9.53
VAPOR DENSITY (AIR=1):
 NOT APPLICABLE
SOLUBILTIY IN WATER (% BY WEIGHT):
  INSOLUBLE
PH:
 NOT APPLICABLE
VAPOR PRESSURE (MM HG):
 NOT APPLICABLE
EVAPORATION RATE:
```

REGULATED BY DOT? NO

I. REACTIVITY DATA:	
STABILITY:	CONDITIONS TO AVOID:
STABLE	NOT APPLICABLE
INCOMPATIBILITY:	
CONTACT WITH >52% HYDROGEN PEROXIDE	MAY CAUSE A VIOLENT REACTION. POWDEREI
LEAD FUSED WITH AMMONIUM NITRATE MA	Y CAUSE A VIOLENT REACTION.
HAZARDOUS DECOMPOSTION PRODUCTS:	
AT TEMPERATURES ABOVE THE MELTING P	OINT, METAL OXIDE FUMES MAY BE EVOLVED.
HAZARDOUS POLYMERIZATION:	
WILL NOT OCCUR	
CONDITIONS TO AVOID:	
NOT APPLICABLE	
J. ENVIRONMENTAL	

WASTE DISPOSAL METHODS (DISPOSER MUST COMPLY WITH ALL FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS):

IF HAZARDOUS UNDER 40 CFR 261, SUBPARTS B AND C, MATERIAL MUST BE TREATED OR DISPOSED IN A FACILITY MEETING THE REQUIREMENTS OF 40 CFR 264 OR 265. IF NON-HAZARDOUS, MATERIAL SHOULD BE DISPOSED IN A FACILITY MEETING THE REQUIREMENTS OF 40 CFR 257.

RCRA STATUS OF UNUSED MATERIAL:

IF DISCARDED IN UNALTERED FORM, MATERIAL SHOULD BE TESTED TO DETERMINE IF IT

MUST BE CLASSIFIED AS A HAZARDOUS WASTE FOR DISPOSAL PURPOSES. UNDER SPECIFIC

CIRCUMSTANCES, APPLICATION CAN BE MADE TO THE EPA ADMINISTRATOR TO HAVE

PARTICULAR WASTE DESIGNATED NON-HAZARDOUS.

! 40 CFR !

! 261 !

K. REFERENCES

PERMISSILBE CONCENTRATIONS REFERENCES:

OSHA REGULATIONS FOR AIRBORNE CONTAMINANTS 29 CFR 1910.1025:

ACGIH THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES.

HAZARD INFORMATION REFERENCES:

DOCUMENTATION OF THE THRESHOLD LIMIT VALUES, 6TH ED., ACGIH

NFPA FIRE PROTECTION GUIDE ON HAZARDOUS MATERIALS, 10TH ED., 1991

PATTY'S INDUSTRIAL HYGIENE AND TOXICOLOGY, VOL 2A. 3RD REV. ED., 1981

HANBOOK OF TOXIC AND HAZARDOUS CHEMICALS; SITTIG, MARSHALL; 1981

GENERAL:

HANDBOOK OF CHEMISTRY AND PHYSICS, 57TH ED., 1976-1977, WEAST, R.C., EDITOR, CRC INC.

L. ADDITIONAL INFORMATION:

INFORMATION (HAZARDS, PRECAUTIONS, FIRST AID, ETC.) IS ABBREVIATED, MORE

DETAILED INFORMATION IS CONTAINED IN REFERENCES FOUND IN SECTION K)

WARNING: THE STATE OF CALIFORNIA HAS LISTED LEAD AS A CHEMICAL WHICH CAN

CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

OSHA BIOLOGICAL LIMIT FOR BLOOD-LEAD LEVEL IS A 3-SAMPLE/6-MONTH AVERAGE OF 50MCG PER 100G OF BLOOD AND/OR TWO CONSECUTIVE SAMPLES OF 60MCG PER 100G.

THIS MATERIAL SAFETY DATA SHEET IS OFFERED SOLELY FOR YOUR INFORMATION, CONSIDERATION, AND INVESTIGATION. ASARCO INCORPORATED PROVIDES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBLITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA COTAINED HEREIN.

****END MSDS****



