



Lead

SECTION I

MATERIAL IDENTIFICATION

Chemical Name Lead

Synonyms

White Lead Inorganic Lead

C.I. Pigment Metal 4 Manufacturer: available from several sources

Plumbum

CAS# 7439-92-1 Possible Occupational Exposures Petroleum refiners

Ceramic workers

Pipe manufacturers

Paint manufacturers

Chemical Formula Pb

Welders Tetraethyl lead

Radiation protection Battery manufacturers

SECTION II

INGREDIENTS AND HAZARDS

Permissible Exposure Limit

50 ug/m³ — OSHA 8-hour TWA

30 ug/m3 — OSHA 8-hour TWA Action Level (If an employee is exposed to lead for more than 8 hours per day the following OSHA formula is used: maximum permissible limit (in ug/m³) = 400 divided by hours worked in the day.)

0.15 mg/m³ — ACGIH TWA (Inorganic dusts and fumes) Less than 0.10 mg/m³ — NIOSH-recommended 10-hour TWA

CERCLA Hazard Rating: Health 3 - Fire 0 - Reactivity 0 - Persistence 3

Immediately Dangerous to Life and Health Concentration — none specified

SECTION III

PHYSICAL DESCRIPTION

Bluish-white, soft, silvery gray metal

Boiling Point: 3164° F

Specific Gravity: 11.3

Solubility in Water: Insoluble

Melting Point: 622° F

Vapor Pressure: 1.3 mm Hg at 970° C

Atomic Weight: 207.2

Solvent Solubility: Nitric Acid, hot concentrated Sulfuric Acid

SECTION IV

INCOMPATIBILITIES AND STORAGE

Strong Oxidizers

Active Metals

Peroxide

Potassium

Sodium

Store in cool, dry place, away from oxidizing agents.

SECTION V

HEALTH HAZARD AND PROTECTION DATA

Target Organs

Central Nervous System

Cardiovascular System

Gastrointestinal System Reproductive System

Gingival Tissue Kidneys

Route of Entry Into Body Inhalation

Ingestion

Symptoms

Anemia Anorexia Tremors Headache

Stupor

Insomnia Ataxia

Vomiting Fatique Comatose Delirium Diarrhea Lassitude Weight Loss

Wrist Drop

Malnutrition Abdominal Pain Optic Neuritis Constipation Incoordination

Reproductive Effects Visual Disturbance Muscular Atrophy Peripheral Neuropathy Muscular Ache

Protective Equipment Requirements

Provide local exhaust or process-enclosure ventilation to meet the published exposure limits. Ventilation equipment must be explosion-proof. Employers shall provide and ensure that employees use appropriate protective clothing and equipment necessary to prevent repeated or prolonged skin contact with this substance.

Employers shall ensure that clothing contaminated with this substance is placed in closed containers for storage until it can be discarded or until the contaminant is removed from the clothing. If the clothing is to be laundered or otherwise cleaned to remove the contaminant, the person performing the cleaning of the clothing shall be informed of the hazardous properties of the substance.

Employers shall provide and ensure that employees use dust-resistant safety goggles where this solid may contact the

Employers shall ensure that all employees subject to skin contact with this substance wash with soap and water — at the end of each workday — all areas of the body which may have contacted the substance.

Employers shall ensure that employees whose clothing may have become contaminated with this substance change into uncontaminated clothing before leaving the work premises.

NOTE: Health hazard information may apply to many inorganic lead compounds.