FLINN SCIENTIFIC, INC. Material Safety Data Sheet (MSDS)

MSDS #: 432.00

Revision Date: February 2, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Lead

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Lead

CAS#: 7439-92-1

SECTION 3 — HAZARDS IDENTIFICATION

Heavy, ductile, gray solid. Forms: foil, sheets, shot, strips, and wire. Odorless.

Elemental lead is a possible human carcinogen (IARC-2B).

Lead as a powder or dust is toxic by ingestion or inhalation. Avoid ingestion and inhalation.

Emits highly toxic fumes of Pb when heated. Chronic exposure to inorganic lead via inhalation or ingestion can result in accumulation in and damage to the soft tissues and bones.

FLINN AT-A-GLANCE

Health-1

Flammability-0 Reactivity-0

Exposure-0

Storage-0

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Finely divided lead dust is flammable.

Emits highly toxic fumes of Pb when heated.

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides. Use fume hood when handling powder form.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: PEL 0.05 mg/m³ (OSHA)

MSDS #: 432.00

Revision Date: February 2, 2012

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Heavy, ductile, gray solid.

Solubility: Soluble in dilute nitric acid. Insoluble in water.

Lead wire also contains 1% antimony (CAS #7440-36-0)

Boiling point: 1740 °C

Melting point: 327.4 °C

Specific gravity: 11.35

Formula: Pb

Formula weight: 207.19

SECTION 10 — STABILITY AND REACTIVITY

Avoid strong acids, ammonium nitrate, hydrogen peroxide, sodium azide, zirconium, sodium acetylide, and chlorine. Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A. ORL-RAT LD_{50} : N.A. Chronic effects: Anemia, reproductive hazard, probable carcinogen. Target organs: Nerves, blood, kidneys, female/male reproductive system. SKN-RBT LD_{50} : N.A. SKN-RBT LD_{50} : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Accumulates in soil and water. Bioaccumulates in animals.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding. Flinn Suggested Disposal Method #27d is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated

Hazard class: N/A UN number: N/A N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-100-4), RCRA code D008.

SECTION 16 — OTHER INFORMATION

This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.