OFI TESTING EQUIPMENT, INC.

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Chemical Name:	LEAD METAL
Trade Name:	LEAD SHOT
OFI Part No.	100-56
Chemical Family:	Granular lead, pigment metal; C.I. 77575
Formula:	Pb
Manufacturer:	OFI Testing Equipment, Inc. 11302 Steeplecrest Drive Houston, TX 77065 USA Phone: (713) 880-9885
In Case of Emergency Spills, Leaks, Fire, Exposure or Accident:	In the USA, call INFOTRAC at 1-800-535-5053 day or night Outside the USA, call collect, (352) 323-3500

SECTION II - COMPOSITION / INFORMATION ON INGREDIENTS

CAS #:	**CHEMICAL NAME**	
7439-92-1	Lead	95.0 to 100.0%

SECTION III - HAZARD IDENTIFICATION

Emergency Overview:	Poison! Danger! May be fatal if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. Neurotoxin. Affects the gum tissue, central nervous system, kidneys, blood and reproductive system. Possible cancer hazard. May cause cancer based on animal data. Risk of cancer depends on duration and level of exposure.
Inhalation:	Can be Absorbed Through the Respiratory System. Local Irritation of Bronchia and Lungs can Occur and, in Cases of Acute Exposure, Symptoms such as Metallic Taste, Chest and Abdominal Pain, and Increased Lead Blood Levels may Follow. See also Ingestion.
Ingestion:	Poison! The Symptoms of Lead Poisoning Include Abdominal Pain and Spasms, Nausea, Vomiting, Headache. Acute Poisoning can Lead to Muscle Weakness, “lead line” on the Gums, Metallic Taste, Definite Loss of Appetite, Insomnia, Dizziness, High Lead Levels in Blood and Urine with Shock, Coma and Death in Extreme Cases.
Skin:	Lead and Lead Compounds may be Absorbed through the Skin on Prolonged Exposure; the Symptoms of Lead Poisoning Described for Ingestion Exposure may Occur. Contact Over Short Periods may Cause Local Irritation, Redness and Pain.
Eye Contact:	Absorption can Occur Through Eye Tissues but the More Common Hazards are Local Irritation or Abrasion.
Chronic Exposure:	Lead is a Cummulative Poison and Exposure Even to Small Amounts can Raise the Body’s Content to Toxic Levels. The Symptoms of Chronic Exposures are like Those of Ingestion Poisoning; Restlessness, Irritability, Visual Disturbances, Hypertension and Gray Facial Color May Also be Noted.
Aggravated by Exposure:	Persons with pre-existing kidney, nerve or circulatory disorders or with skin or eye problems may be more susceptible to the effects of this substance.

SECTION IV - FIRST AID MEASURES

Inhalation:	Remove to Fresh Air. If Not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.
Ingestion:	Induce Vomiting Immediately as Directed by Medical Personnel. Never Give Anything to an Unconscious Person. Get Medical Attention.
Skin:	In Case of Contact, Immediately Flush Skin with Plenty of Water for at Least 15 Minutes while Removing Contaminated Clothing and Shoes. Wash Clothing and Shoes before Reuse.
Eyes:	Immediately Flush Eyes with Plenty of Water for at Least 15 Minutes, Lifting Upper and Lower Eyelids Occasionally. Get Medical Attention Immediately.

	SECTION V - FIRE FIGHTING MEASURES
Fire:	Not Considered to be a Fire Hazard. Powder / Dust is Flammable when Heated or Exposed to Flame.
Explosion:	Not Considered to be a Explosion Hazard.
Fire Extinguishing Media:	Use any Means Suitable for Extinguishing Surrounding Fire. Do Not Allow Water Runoff to Enter Sewers or Waterways.
Special Information:	Evacuate Affected area, Avoid Smoke and Fumes. In the Event of Fire, Wear full Protective Clothing and NIOSH-Approved Self-Contained Breathing Apparatus with Full Facepiece Operated in the Pressure Demand or Other Positive Pressure Mode. Can Produce Toxic Lead Fumes at Elevated Temperatures and Also React with Oxidizing Materials.
	SECTION VI - ACCIDENTAL RELEASE MEASURES
	Ventilate area or Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Sweep up and Containerize for Reclamation or Disposal. Vacuuming or Wet Sweeping may be Use to Avoid Dust Dispersal.
	SECTION VII - HANDLING AND STORAGE
	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Areas in which exposure to lead metal or lead compounds may occur should be identified by signs or appropriate means, and access to the area should be limited to authorized persons. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
	SECTION VIII - EXPOSURE CONTROL / PERSONAL PROTECTION
Ventilation System:	A System of Local and/or General Exhaust is Recommended to Keep Employee Exposures below the Airborne Exposure Limits. Local Exhaust Ventilation is Generally Preferred because it can Control the Emissions of the Contaminant at its Source, Preventing Dispersion of it into the General Work Area.
Airborne Exposure Limits:	OSHA - Permissible Exposure Limit (PEL): 0.05 mg/m^3 (TWA) For Lead, Elemental and Inorganic Compounds, as Pb. ACGIH - Threshold Limit Value (TLV): 0.05 mg/m^3 (TWA).
Personal Respirators: (NIOSH APPROVED)	If the Exposure Limit is Exceeded, a Half-Face High Efficiency Dust/Mist Respirator may be Worn for up to Ten Times the Exposure Limit or the Maximum use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest. A Full-Facepiece High Efficiency Dust/Mist Respirator may be worn up to 50 Times the Exposure Limit, or the Maximum Use Concentration Specified by the Appropriate Regulatory Agency, or Respirator Supplier, Whichever is Lowest.
Skin Protection:	Wear Impervious Protective Clothing, Including Boots, Gloves, Lab Coat, Apron or Coveralls, as Appropriate, to Prevent Skin Contact.
Eye Protection:	Use Chemical Safety Goggles. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.
Other:	Eating, drinking, and smoking should not be permitted in areas where solids or liquids containing lead compounds are handled, processed, or stored.
	SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES
Appearance / Odor:	Small, White to Blue-Gray Metallic Shot or Granules / Odorless
Solubility:	Insoluble in Water.
Specific Gravity:	11.34
pH:	No Information Found
% Volatiles by Vol.:	0
Melting Point:	622 ^{0}F (327.5 ^{0}C)
Boiling Point:	3164 ^{0}F (1740 ^{0}C)
Vapor Density (Air=1):	No Information Found
Vapor Pressure (mmHg):	1.77 @ 1832 ^{0}F (1000 ^{0}C)
	SECTION X - STABILITY AND REACTIVITY
General Reactivity:	Stable under Ordinary Conditions of Use and Storage.
Hazardous Decomposition:	Will Not Occur but toxic lead or lead oxide fumes may form at elevated temperatures.
Incompatibilities:	Ammonium Nitrate, Chlorine Trifluoride, Hydrogen Peroxide, Sodium Azide, Zirconium, Disodium Acetylide, Sodium Acetylide and Oxidants.
Hazardous Polymerization:	Will Not Occur.
Conditions to Avoid	Heat, flames, ignition sources and incompatibles.

SECTION XI - TOXICOLOGICAL INFORMATION

Toxicological Data: Investigated as a tumorigen, mutagen, reproductive effector.

Reproductive Toxicity: Lead and other smelter emissions are human reproductive hazards. (Chemical Council on Environmental Quality; Chemical Hazards to Human Reproduction, 1981).

Carcinogenicity: EPA / IRIS classification: Group B2 - Probable human carcinogen, sufficient animal evidence.

SECTION XII - ECOLOGICAL INFORMATION

Environmental Fate: When released into the soil, this material is not expected to leach into groundwater. This material may bioaccumulate to some extent.

Environmental Toxicity: No information found.

SECTION XIII - DISPOSAL CONSIDERATIONS

Whatever Cannot be Saved for Recovery or Recycling Should be Managed in an Appropriate and Approved Waste Disposal Facility. Processing, Use or Contamination of this Product may Change the Waste Management Options. State and Local Disposal Regulations may Differ from Federal Disposal Regulations. Dispose of Container and Unused Contents in Accordance with Federal, State and Local Requirements.

SECTION XIV - TRANSPORT INFORMATION

Hazard Class: Not Regulated

Identification No.: Not Regulated

SECTION XV - REGULATORY INFORMATION

Chemical Inventory Status – Part 1:

Ingredient	TSCA	EC	Japan	Australia
Lead (7439-92-1)	Yes	Yes	Yes	Yes

Chemical Inventory Status – Part 2:

Ingredient	Korea	DSL	NDSL	Phil.
Lead (7439-92-1)	Yes	Yes	No	Yes

Federal, State & International Regulations – Part 1:

	-SARA 302-		------SARA 313------	
Ingredient	RQ	TPQ	List	Chemical Catg.
Lead (7439-92-1)	No	No	Yes	No

Federal, State & International Regulations – Part 2:

Ingredient	-RCRA- CERCLA	-TSCA- 261.33	8(d)
Lead (7439-92-1)	10	No	No

Chemical Weapons Convention:

TSCA 12 (b):

CDTA: No

SARA 311/312: No

Warning: No

Australian Hazchem Code: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Pure / Solid)

Poison Schedule: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

WHMIS: None allocated.

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This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION XVI - OTHER INFORMATION

NFPA Rating: HEALTH-3, FLAMMABILITY-1, REACTIVITY-0

Disclaimer: The information contained herein is based upon data believed to be reliable and reflects our best professional judgment. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).