

A & L Shielding Inc.

268 Old Lindale Road
Rome, GA 30161

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet complies with the U.S. OSHA Hazard Communications Standard 29CFR 1910.1200 and the Hazardous Products Act of the Canada Labour Code.

PRODUCT: Lead (Fabrications / Forms)

SECTION I

Manufacturers Name:	A & L Shielding Inc. 268 Old Lindale Road Rome, GA 30161	Information Phone:	706-235-8822
		Emergency Phone:	706-235-8822
		Preparation Date:	January 2008

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	CAS NO.	US-NIOSH RTECS NO.	US OSHA 8 HR AL	US OSHA 8 HR PEL	ACGIH 8 HR TLV	WT.%
Lead	7439-92-1	0F7525000	0.03mg/m ³	0.05mg/m ³	0.15mg/m ³	99.8+

AL = Action Level PEL = Permissible Exposure Limit TLV = Threshold Limit Value

SECTION III - PHYSICAL DATA

APPEARANCE & ODOR (AT NORMAL CONDITIONS) : Solid - silver metallic to gray metallic metal - no odor
SPECIFIC GRAVITY (H₂O = 1) : 11.34
MELTING POINT (DEGREES C) : 328
BOILING POINT (DEGREES C) : 1744
SOLUBILITY IN WATER : Insoluble
EVAPORATION RATE (BUTYL ACETATE = 1) : Not Applicable
VAPOR DENSITY (AIR = 1) : Not Applicable
VAPOR PRESSURE (mmHg) : Not Applicable
PH : Not Applicable

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : Non-Flammable
FLAMMABLE LIMITS : Not Applicable
EXTINGUISHING MEDIA : No specific agents recommended
SPECIAL FIRE FIGHTING PROCEDURES : Use full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus operated in a positive-pressure mode
UNUSUAL FIRE AND EXPLOSION HAZARDS : None

SECTION V - REACTIVITY DATA

STABILITY : Stable
CONDITIONS TO AVOID : Not Applicable
INCOMBATIBILITY : Strong Oxidizers, Hydrogen Peroxide, Active Metals such as Sodium, Potassium. Powered lead fused with ammonium nitrate may cause a violent reaction. NEVER mix molten metal with water - it will explode.
HAZARDOUS DECOMPOSITION PRODUCTS : At temperatures above the melting point lead oxide fumes may be evolved.
HAZARDOUS POLMERIZATION : Will not occur

SECTION VI - HEALTH HAZARD DATA

NOTE: EXPOSURE TO THE SOLID FORM OF THIS PRODUCT PRESENTS FEW HEALTH HAZARDS IN ITSELF. HOWEVER, NORMAL HANDLING OR PROCESSING OF THIS MATERIAL MAY RESULT IN GENERATION OF LEAD DUST AND/OR FUMES, WHICH MAY PRESENT A POTENTIAL HEALTH HAZARD.

SECTION VI - HEALTH HAZARD DATA (CONTINUED)

ROUTES OF ENTRY	:	Inhalation of dust/fume & ingestion of dust are the two major routes of entry of inorganic lead into the human body.
COMMON METHODS OF CONTROL	:	Ingestion can be prevented by exercising normal, good personal hygiene prior to smoking or eating. Smoking and eating should be confined to noncontaminated areas. Users should not smoke while installing or handling this product and should wash hands, face, neck, and arms before eating, smoking, or applying cosmetics. Work clothes and equipment should remain in designated lead contaminated areas and should never be taken home or laundered with personal clothing. Launder contaminated clothing separately before reuse. Most inhalation problems can be prevented by use of proper ventilation and respirator methods discussed in Section VII.
SYMPTOMS & EFFECTS OF OVEREXPOSURE	:	<p>Cronic (prolonged) overexposure to lead can result in systemic lead poisoning with symptoms of metallic taste, anemia, insomnia, weakness, constipation, abdominal pain, gastrointestinal disorders, joint and muscle pains, and muscular weakness, and may cause damage to the blood-forming, nervous, kidney, and reproductive systems. Damage may include reduced fertility in both men and women, damage to the fetus of exposed pregnant women, anemia, muscular weakness & kidney disfunction.</p> <p>Acute (Severe short-term) overexposure to lead may lead to central nervous system disorders, characterized by drowsiness, seizures, coma and death. It should be recognized that exposures of this magnitude in an industrial or construction environment are extremely unlikely.</p>
MEDICAL CONDITIONS POSSIBLE AGGRIVATED BY EXPOSURE	:	Diseases of the blood and blood forming organs, kidneys, nervous & possibly reproductive systems.
CARCINOGENITY	:	Not listed as a carcinogen by NTP, OSHA, or ACGIH. IARC classifies "lead and its compounds" as a Group 2B carcinogen (possibly carcinogenic to humans)
ADDITIONAL INFORMATION	:	Lead and its compounds have been tentatively classified by the USEPA Carcinogen Assessment Group as a Group B2 Carcinogen (Probable human carcinogen - a combination of sufficient evidence in animals and inadequate data for humans). IARC lists lead and its compounds as a teratogen.
EMERGENCY & FIRST AID PROCEDURES	:	<p>SKIN : Normal hygiene & first-aid procedures - wash with soap and water.</p> <p>EYES : Flush well with running water to remove particulate. If irritation persists, get medical attention.</p> <p>ACUTE : Remove from exposure. Obtain immediate medical attention. If breathing has stopped, initiate artificial respiration.</p> <p>INHALATION</p> <p>INGESTION : Give water; induce vomiting only in a conscious non-convulsing individual; obtain immediate medical attention.</p>

SECTION VII - PROTECTION MEASURES

RESPIRATORY PROTECTION : Respiratory protection is required where airborne exposures exceed U.S. OSHA/ACGIH permissible air concentrations. Respirator selection shall be made in accordance with the U.S. Occupational Exposure Standard for Lead, 29 CFR 1910.1025 & the Respiratory Protection Standard, 29 CFR 910.134.

VENTILATION : Good general dilution ventilation or ventilation as described in "Industrial ventilation, A manual of Recommended Practice", by the ACGIH, is recommended to maintain exposure levels below the permissible exposure limits (PEL's) or threshold limit values (TLV's) specified by U.S. OSHA or other local or state regulations.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING & USE

PRECAUTIONS TO BE TAKEN : IN HANDLING & STORING Practice good housekeeping procedures to prevent dust accumulations. Keep material dry. Avoid storage near incompatible materials (See Section V) Keep product away from children & their environment, feed products, food products, and domestic animals.

OTHER PRECAUTIONS : Special attention is drawn to the requirements of the U.S. OSHA Lead Standard (29 CFR 1910,1025) and Respiratory Protection Standard, 29 CFR 1910.134) should airborne exposures exceed the U.S. OSHA Action Level (AL) or PEL. Inadvertant contaminants to product such as moisture, ice, snow, grease, or oil can cause an explosion when charged to a molten metal bath or melting furnace. Preheat to eliminate this risk.

SECTION IX - SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCEDURES: 1) Material in dust form - minimize exposure. Clean up using dustless methods (e.g. HEPA vacuum). Do not use compressed air. 2) Place in closed labeled containers for recycling or disposal. 3) Keep out of water ways. Note: Cleanup personnel should wear protective clothing and respiratory protection where dust/fume exposure exists.

WASTE DISPOSAL METHODS : May have value on a recycled basis. If disposed of, do so in a Permitted disposal site in accordance with all federal, state, and local disposal or discharge regulations. The user of the product must determine whether the product and the form it is in falls under the U.S. Resource Conservation and Recovery Act (RCRA)as a hazardous waste.

SECTION X - UNITED STATES SARA TITLE III INFORMATION

CHEMICAL NAME	EHS RQ (LBS) (1)	EHS TPQ (LBS) (2)	SECT. 313 (3)	313 CAT. (4)	311/312 CAT. (5)
Lead	N/A	N/A	Yes	Lead	H-1, H-2
(1) =	Reportable quantity of extremely hazardous substance, Section 302				
(2) =	Threshold planning quantity, extremely hazardous substance, Section 302				
(3) =	Toxic chemical list, Section 313				
(4) =	Chemical category as required by Section 313 (40 CFR 372.42). Subject to annual release reporting requirements.				
(5) =	Hazard category as required by Section 313/312 reporting:				
	Health H-1 = Immediate (Acute) Health Hazard	Physical P-3 = Fire Hazard			
	H-2 = Delayed (Chronic) Health Hazard	P-4 = sudden release of pressure hazard.			
		P-5 = Reactive Hazard			

SECTION XI - UNITED STATES CERCLA SECTION 103 INFORMATION

THIS PRODUCT/MIXTURE CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE RELEASE REPORTING REQUIREMENTS OF SECTION 302.

CHEMICAL NAME	RQ (LBS) (1)	CERCLA STATUTORY RQ
Lead	1.0	

SECTION XI - UNITED STATES CERCLA SECTION 103 INFORMATION (CONTINUED)

FOOTNOTES

(1) Reportable quantity (RQ) under CERCLA Section 302. Spills to the environment exceeding the reportable quantity in any 24 hour period must be reported to the U.S. National Response Center (800-424-8802). Reporting of releases of the hazardous substance(s) is **NOT** required if the diameter of the pieces of the solid metal(s) released is equal to or exceeds 100 micrometers (0.004 inches).

SECTION XII - USDOT TRANSPORTATION INFORMATION

DOT SHIPPING NAME : This product is not regulated by the USDOT as shipped.

SECTION XIII - ADDITIONAL INFORMATION

UNITED STATES - CLEAN WATER ACT: The use of lead pipes or sheet lead in any private or public potable water supply is prohibited by the Clean Water Act.

UNITED STATES - STATE HAZARDOUS SUBSTANCE LIST Lead is on the state hazardous substance lists of MA and NJ, and on the California Safe Drinking Water and Toxic Enforcement Act of 1986 Chemical List.

CANADA - HPA WHMIS LIST : Lead is on this list.

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