METALICO™

MATERIAL SAFETY DATA SHEET
This Material Safety Data Sheet complies with the U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200

PRODUCT: LEAD (FABRICATIONS/FORMS) CODE: 3001

COMMON NAME OR SYNONYMS: Corroding, Chemical, Acid, Common Desilverized, Tellurium, Calcium (<1% Calcium), & High Purity Grade Lead in the following forms: wire, ingot, pig, pipe, anodes, cast or extruded bar, sheet, brick, wool, caulking, came, tape, coils, fittings, flashings, lining, flanges, sleeving, tubing and miscellaneous extruded lines. Includes trade name products: Attenulead™.

NFPA/HMIS HAZARD CODES: HEALTH: 1/1 FIRE: 0/0 REACTIVITY: 0/0 SPECIAL: NA

0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SECTION I

MANUFACTURERS NAME: Metalico - Granite City, Inc.

PREPARATION DATE: November 1999

REVISIONS: This is a revised Material Safety Data Sheet. Revised information appears in the text line(s), as indicated by asterisk(s) (*) in the right margin.

INFORMATION:
1. Metalico - Granite City, Inc.
1200 16th Street
Granite City, IL 62040
618.451.4400
2. Metalico - EVANS, Inc.
740 Lambert Drive N.E.
Atlanta, GA 30324
404.875.5636

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. PERCENT
Lead	7439-92-1	OF7525000	0.03 mg/m3	0.05 mg/m3	0.05 mg/m3	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 (H_2O = 1) : 11.34
MELTING POINT (DEGREES C) : 328
BOILING POINT (DEGREES C) : 1744
SOLUBILITY IN WATER : Insoluble

*** SECTION IV - FIRE & EXPLOSION HAZARD DATA***

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

SECTION V - REACTIVITY DATA

STABILITY : Stable
CONDITIONS TO AVOID : Not Applicable
INCOMPATIBILITY : Strong Oxidizers, Hydrogen Peroxide, Active Metals - Sodium, Potassium. Powdered 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 POLYMERIZATION : 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 EXPOSURE TO PRODUCT COMPOUNDS AND/OR DECOMPOSITION PRODUCTS, WHICH MAY PRESENT A POTENTIAL HEALTH HAZARD.

ROUTES OF ENTRY : Inhalation of dust/fume & ingestion of dust.

SYMPTOMS & EFFECT OF OVEREXPOSURE: Chronic (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, & reproductive systems. Damage may include reduced fertility in both men and women, damage to the fetus of exposed pregnant women, anemia, muscular weakness & kidney dysfunction.

Acute (severe short-term) overexposure to lead may lead to central nervous system disorders, characterized by drowsiness, seizures, coma & death. It should be recognized that exposures of this magnitude in an industrial environment are extremely unlikely.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE : Diseases of the blood and blood-forming organs, kidneys, nervous and possibly reproductive systems.

CARCINOGENICITY : Not listed as a carcinogen by NTP, OSHA, ACGIH; IARC classifies "lead and its compounds" as a Group 2B carcinogen (possibly carcinogenic to humans).

ADDITIONAL INFORMATION : In industrial/commercial processing operations, pre-employment medical evaluations are recommended for large users of this product (required at contaminant exposure levels exceeding the Lead AL - See U.S. OSHA Lead Standard, 29 CFR 1910.1025). Attention should be directed to skin, eyes, respiratory tract, blood, kidneys, pulmonary function and neurological health.

Periodic medical examinations should be repeated on an annual basis for those employees exposed to potentially hazardous levels of this product. Please consult the U.S. OSHA Lead Standard (29 CFR 1910.1025) for specific guidance; periodic medical examinations are required under certain circumstances.

U.S. OSHA Biological Limit for Blood Lead Level is a 3 sample/6 month average of 50 mcg per 100g (or higher) of whole blood and/or two (2) consecutive samples of 60 mcg per 100g (or higher). See U.S. OSHA Standard 29 CFR 1910.1025 for further information.

Lead and its compounds has tentatively been classed 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:

SKIN : Normal hygiene and first aid procedures - wash with soap and water.

EYES : Flush well with running water to remove particulate. If irritation persists get medical attention.

ACUTE INHALATION: Remove from exposure. Obtain immediate medical attention. If breathing has stopped, initiate artificial resuscitation.

INGESTION : Give water; induce vomiting only in a conscious non-convulsing individual; obtain immediate medical attention.

CALIFORNIA NOTIFICATION:

WARNING : This product contains a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). *

NOTICE : This informational warning *must* be transferred with the product, to all downstream users of this product. *

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. Respiratory Protection Standard 29 CFR 1910.139.

VENTILATION : Good general dilution ventilation, or ventilation, as described in "Industrial Ventilation, A Manual of Recommended Practice", by the American Conference of Governmental Industrial Hygienists, is recommended in order 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.

PROTECTIVE GLOVES : Recommended for prolonged contact/heat. Required above the Lead PEL.

EYE PROTECTION : Safety glasses or goggles are recommended where the possibility exists of getting dust particles in the eyes. Safety glasses or goggles with faceshield are recommended around molten metal.

OTHER PROTECTIVE EQUIPMENT : Full protective clothing and shoes are required for employee exposure above the Lead PEL. Other safety equipment should be worn as appropriate for the work environment. Keep work clothing separate from street clothes.

WORK/HYGIENIC PRACTICES : Do not permit eating, drinking, or the use of cosmetics or tobacco products while handling or processing material or in product work areas. Practice good personal hygiene procedures. Wash hands and face thoroughly before eating, drinking, applying cosmetics or using tobacco products. Full protective clothing is to be worn by workers exposed to concentrations of lead dust/fume above the PEL, and showering is required before changing into street clothes. Keep work clothing separate from street clothes. Work clothes and equipment should remain in designated lead contaminated areas and never taken home or laundered with personal clothing. Avoid inhalation and ingestion of product, and activities which generate dust or fume. Keep melting/soldering temperatures as low as possible to minimize the generation of fume.

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 and 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 Respirator Standard (29 CFR 1910.139) should airborne exposures exceed the U.S. OSHA Action Level (AL) or PEL. Inadvertent 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. (Preheating will remove moisture from product).

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 waterways.
Note: Clean-up personnel should wear protective clothing and respiratory protection where dust/fume exposure exists.

OTHER PROCEDURES : For large product users or involving large product quantities, we recommend that the purchaser establish a spill prevention, control and counter measure plan. This plan should include procedures for proper storage as well as clean-up of spills or leaks. The procedures should conform to safe practices and provide for proper recovery and/or disposal. Depending on the quantity spilled, notification to the U.S. National Response Center (800-424-8802) may be required in case of hazardous substances. (See USEPA and USDOT regulations; also various state and local regulations.)

WASTE DISPOSAL METHODS : May have value on a recycled basis. If disposed of, dispose of in a permitted disposal site in accordance with all federal, state and local disposal or discharge regulations. Under the U.S. Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the Product to determine, at the time of disposal, whether the Product falls under the RCRA as a hazardous waste. This is because Product uses, transformations, synthesis, mixtures, etc. may cause the resulting end-product to be classified as hazardous.

SECTION X - UNITED STATES SARA TITLE III INFORMATION

THIS PRODUCT/MIXTURE CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE U.S. SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372. THE PERCENT BY WEIGHT OF EACH TOXIC CHEMICAL AND ITS ASSOCIATED CHEMICAL ABSTRACT SYSTEM (CAS) NUMBER ARE TO BE FOUND IN SECTION II OF THIS MATERIAL SAFETY DATA SHEET.

CHEMICAL NAME	EHS RQ (LBS) (*1)	EH TPQ (LBS) (*2)	SEC. 313 (*3)	313 CATEGORY (*4)	311/312 CATEGORIES (*5)
Lead	Not Applicable	Not Applicable	Yes	Lead	H-1, H-2

FOOTNOTES

*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 FOR SARA SECTION 311/312 REPORTING:
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD
H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL P-3 = FIRE 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)
Lead	10.0

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). NO REPORTING OF RELEASES OF THE HAZARDOUS SUBSTANCE(S) IS 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 - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME	: Non-regulated material
TECHNICAL NAME	: NA
HAZARD CLASS	: NA
UN NO.	: NA
PACKING GROUP	: NA
EMERGENCY RESPONSE GUIDE NUMBER	: NA
OTHER	: NA

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 system is prohibited by the Clean Water Act.

UNITED STATES - STATE HAZARDOUS SUBSTANCE LISTS: Lead appears on the state hazardous substance lists of MA and NJ.

CANADA - HPA WHMIS LIST: Lead appears on the Canadian HPA WHMIS Chemical List.