

MATERIAL SAFETY DATA SHEET

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Section 1. Chemical Product and Company Identification

Product Code

Product Name

Metspec 255, Bismuth/Lead Alloy

Manufacturer's Name

MCP Metalspecialties, Inc.

Emergency Telephone Number

203-384-0331

Address (Number, Street, City, State, and ZIP Code)

515 Commerce Drive

Telephone Number For Information

203-384-0331

Date Prepared

1-1-06

Signature of Preparer (optional)

Fairfield, CT. 06432-5593

Section 2. Composition / Information on Ingredients

Component	CAS Registry #	wt. %	Exposure Limits	
			ACGIH TLV	OSHA PEL
Bismuth	7440-69-9	55.5	Not Applicable	Not Applicabler
Lead	7439-92-1	44.5%	0.05mg/cu.m.	0.2mg/cu.m.

Section 3. Hazards Identification

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EMERGENCY OVERVIEW

Lead is a toxic chemical according to SARA Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

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POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Direct contact may cause local irritation. Symptoms are more severe from prolonged over-exposure.

INHALATION: Exposure to Lead and its compounds may cause headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia and pain in legs, arms and joints.

SKIN CONTACT: SHORT TERM OVER-EXPOSURE: DIRECT CONTACT MAY CAUSE LOCAL IRRITATION. SYMPTOMS ARE MORE SEVERE FROM PROLONGED OVER-EXPOSURE.

LONG TERM OVER-EXPOSURE: INGESTION, INHALATION.

PROLONGED EXPOSURE TO LEAD AND ITS COMPOUNDS MAY PRODUCE MANY OF THE SYMPTOMS OF SHORT-TERM EXPOSURE AND MAY ALSO CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, GASTROINTESTINAL DISTURBANCES, ANEMIA AND WRIST-DROP. SYMPTOMS OF CENTRAL NERVOUS SYSTEMS DAMAGES INCLUDE FATIGUE, HEADACHES, TREMORS, HYPERTENSION, HALLUCINATIONS, CONVULSIONS AND DELIRIUM. KIDNEY DYSFUNCTION AND POSSIBLE INJURY HAS ALSO BEEN ASSOCIATED WITH CHRONIC LEAD POISONING.

INGESTION: INGESTION MAY SHOW NAUSEA AND ABDOMINAL PAIN

CHRONIC EFFECTS / CARCINOGENICITY: Lead intoxication may result from chronic high exposure with symptoms of anemia, insomnia, weakness, constipation and gastrointestinal disorders.

CHRONIC OVER-EXPOSURE TO LEAD HAS BEEN IMPLICATED AS A CAUSATIVE AGENT FOR THE IMPAIRMENT OF MALE AND FEMALE REPRODUCTIVE ORGANS, BUT THERE IS AT PRESENT NO SUBSTANTIATION OF THE IMPLICATION.

PREGNANT WOMEN SHOULD BE PROTECTED FROM EXCESSIVE EXPOSURE. LEAD CAN CROSS THE PLACENTAL BARRIER AND IT IS REPORTED THAT INFANTS WITH NEUROLOGICAL DISORDERS HAVE BEEN BORN TO WOMEN WHO HAVE EXPERIENCED EXCESSIVE EXPOSURE.

Section 4. First Aid Measures

INHALATION: Remove to fresh air. Seek medical attention if breathing is difficult.

EYE CONTACT: Immediately flush with copious amounts of fresh water for 15 minutes. Contact physician if irritation persists.

SKIN CONTACT: Flush with water for 15 minutes. Contact physician if irritation persists.

INGESTION: Contact physician in all cases.

Section 5. Fire Fighting Measures

FLAMMABLE PROPERTIES:

FLASH POINT: Not Applicable

METHOD USED: Not Applicable

FLAMMABLE LIMITS

LFL: Not Applicable

UFL: Not Applicable

EXTINGUISHING MEDIA: No specific media recommended

NEVER USE WATER ON MOLTEN METAL

FIRE & EXPLOSION HAZARDS: Not Applicable

FIRE FIGHTING INSTRUCTIONS: NEVER USE WATER ON MOLTEN METAL

Section 6. Accidental Release Measures

A clean-up procedure which minimizes exposure is required. Vacuuming is preferred. Place all materials in closed containers. Do not use compressed air for cleaning.

Section 7. Handling and Storage

Handling: Signs and labels in work areas and for contaminated containers or equipment may be required under OSHA regulations.

PREVENTATIVE HYGIENE IS EXTREMELY IMPORTANT. No tobacco or food in work area. Wash thoroughly before eating or smoking. Shower and change clothes at end of shift. Do not wear contaminated clothing home. Do not use compressed air for blowing dust off clothes.

Section 8. Exposure Controls / Personal Protection

ENGINEERING CONTROLS: Local exhaust may be required to maintain PEL below 0.05 Mg/M³

RESPIRATORY PROTECTION: NOISH/MSHA APPROVED RESPIRATOR FOR TOXIC DUST AND FOR FUME.

SKIN PROTECTION: Leather Cloves and full cover protective clothing required.

EYE PROTECTION: SAFETY GLASSES FOR GRINDING OPERATION

EXPOSURE GUIDELINE (S): DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS, KIDNEYS, NERVOUS AND POSSIBLY REPRODUCTIVE SYSTEMS.

Section 9. Physical and chemical Properties

APPEARANCE:	Silver to Gray	PHYSICAL STATE:	Solid
BOILING POINT:	1560°C - Bismuth	SOLUBILITY IN WATER:	Insoluble
EVAPORATION RATE:	Not Applicable	SPECIFIC GRAVITY:	10.5
FREEZING POINT:	Not Applicable	VAPOR DENSITY:	Not Applicable
MELTING POINT:	255°F	VAPOR PRESSURE:	Not Applicable
MOLECULAR WEIGHT:	Not Applicable	VISCOSITY:	Not Applicable
ODOR:	Odorless	% VOLATILE:	Not Applicable
pH:	Not Applicable		

Section 10. Stability and Reactivity

CHEMICAL STABILITY: Stable

INCOMPATIBILITY: Contact with hydrogen peroxide may cause a violent reaction at temperature above the melting point. Lead oxide fumes may be evolved.

HAZARDOUS DECOMPOSITION PRODUCTS: Lead oxide.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CHRONIC / CARCINOGENICITY: Not believed to be carcinogenic

Section 13. Disposal Considerations

DO NOT INCINERATE. INCINERATION WILL GENERATE TOXIC FUMES. IF DISCARDED, THIS MATERIAL MAY BE CONSIDERED HAZARDOUS WASTE. THIS MATERIAL SHOULD BE COLLECTED FOR RECLAIM VALUE.