MAGNOLIA METAL CORPORATION

SAFETY DATA SHEET

No.SDS-4 Rev.1

DATE ISSUED: 6/01/2015

1. IDENTIFICATION

IDENTITY: (label identifier)

Tin Base Babbitts

This SDS Supplied For:

Adamant
DZL
Power

MANUFACTURER'S NAME Magnolia Metal Corporation	**STREET ADDRESS** 63859 730 Road
EMERGENCY TELEPHONE NO. 402-274-3152	**MAILING ADDRESS** Same
TELEPHONE NO. 402-274-3152	**CITY, STATE, ZIP CODE, COUNTRY** Auburn, Nebraska 68305 USA
FAX NO. 402-274-3156	**E-MAIL ADDRESS/WEBSITE** bronzesales@magnoliabronze.com

RECOMMENDED USE:

Surfacing bearings and other industrial uses

2. HAZARD IDENTIFICATION

Hazard Symbol:

Signal Word: WARNING

Hazard Statement: May cause respiratory irritation.

Precautionary Statement

Prevention: Do not handle until all safety precautions have been read and understood.
Do not eat, drink or smoke while handling this product.
Wash hands, face and any exposed skin after handling.
Avoid breathing dust, fumes or mist.
Use personal protective equipment as required.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse with water for 15 minutes. If eye irritation persists seek medical attention.
IF ON SKIN: Wash with soap and water. If skin irritation or rash occurs seek medical attention.

Storage: No special requirements.

Disposal: Recover or recycle if possible. Dispose of according to local, regional, national and international Regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME/COMMON NAME/SYNONYM	Wt %	CAS NUMBER
Antimony (Sb) Metal	4.0–14.0	7440-36-0
Copper (Cu) Metal	3.0–8.5	7440-50-8
Lead (Pb) Metal	0.0–0.4	7439-92-1
Tin (Sn) Metal	80.0–92.0	7440-31-5

4. FIRST AID MEASURES

EYE CONTACT: Do not rub eyes. Flush eyes with plenty of water for 15 minutes. Remove contact lenses. If irritation persists seek medical attention.

SKIN CONTACT: Wash with soap and water. If skin irritation or rash occurs seek medical attention.

INGESTION: Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

INHALATION: In the event of excessive exposure to dust or fumes, remove employee to fresh air. If breathing is difficult obtain immediate medical assistance.

5. FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES: This product is not flammable. When involved in a fire decomposition of this product may produce fumes or gases hazardous to health.

EXTINGUISHING MEDIA: Dry chemical, foam or CO2.

PROTECTION OF FIREFIGHTERS: Self-contained breathing apparatus and protective clothing

6. ACCIDENTAL RELEASE MEASURES

Not applicable

7. HANDLING & STORAGE

RECOMMENDED STORAGE

No special requirements

ADVICE ON SAFE HANDLING

Use personal protection recommended in section 8.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

There are no health hazards from Babbitt in solid form. If an operation generates dust, fumes or mist use proper ventilation to keep airborne contaminates below the exposure limit. Please consult a competent person for guidance on exposure assessment and controls.

SUBSTANCE	ACGIH TLV mg/m^3	OSHA PEL mg/m^3	NIOSH mg/m^3
Antimony (Sb)	0.5	0.5	0.5
Copper (Cu)	1	1	1
Lead (Pb)	0.15	0.05	0.1
Tin (Sn)	2	2	2

TERMS

All exposure limits are based on an 8 hour time weighted average (TWA) unless otherwise noted.

N/E = None Established
I = Inhalable fraction
TLV = Threshold Limit Value/American Conference of Governmental Industrial Hygienists (ACGIH)
PEL = Permissible Exposure Limit / OSHA
AL = Action Level / OSHA
mg/m^3 = milligrams per cubic meter
µg/m^3 = micrograms per cubic meter

PERSONAL PROTECTION

Eye Protection: Use safety glasses with side shields.

Hand protection: Use suitable protective gloves to prevent cuts and abrasions.

Skin protection: Not normally needed.

Other: Wear suitable protective clothing.

Respiratory protection: Only required if the exposure limits are exceeded. Use NIOSH approved respirator for toxic dust, fume or mist. A respiratory protection plan that meets OSHA's 29 CFR and ANSI Z88.2 requirements must be followed whenever work place conditions warrant the use of a respirator.

General hygiene practices: Do not eat, drink or smoke in the work area. Wash face, hands and any exposed skin after handling the material and before eating, drinking or smoking. Contaminated work clothing should not be worn home after work and should be stored separate from street clothing. If possible, an industrial laundry service should be used to eliminate the possibility of contaminating the home environment.

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE /PHYSICAL STATE: Dull gray in color.
ODOR: None
MELTING POINT/FREEZING POINT: Approximately 238°C (460°F) depending on composition
BOILING POINT: 1243°C (2270°F) (for tin)
FLAMMABILITY: Not combustible
UPPER AND LOWER FLAMMABILITY LIMITS: Not combustible
AUTO IGNITION TEMPERATURE: Not applicable
DECOMPOSITION TEMPERATURE: Not applicable
VAPOR DENSITY: Not applicable
SPECIFIC GRAVITY (relative density): 7.29 (for tin)
VAPOR PRESSURE: Not applicable
EVAPORATION RATE: Not applicable
SOLUBILITY IN WATER: Insoluble
pH: Not applicable
VISCOSITY: Not applicable
PARTITION COEFFICIENT: Not applicable
FLASH POINT: Not applicable

10. STABILITY & REACTIVITY

CHEMICAL STABILITY: Babbitt in solid form is stable.

CONDITIONS TO AVOID: None

REACTIVITY: Not reactive

HAZARDOUS DECOMPOSITION PRODUCTS: Lead oxide fumes.

INCOMPATIBLE MATERIALS: None

HAZARDOUS POLYMERIZATION: Not applicable

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Babbitt in solid form presents no significant health hazards under normal handling conditions. Dust, fumes or mist generated by melting, machining, grinding, welding or cutting may result in potential exposure to airborne particles.

EYE CONTACT: Mechanical actions may produce dust, fumes or mist that could irritate the eye.

SKIN: May cause an allergic reaction to the skin.

INGESTION: Ingestion of dusts generated during working operations may cause nausea and vomiting.

INHALATION: Mechanical actions may produce dust, fumes or mist which may be irritating to mucous membranes and respiratory tract.

Carcinogen Classification of Ingredients				
INGREDIENT	**OSHA**	**NTP**	**IARC**	**TARGET ORGAN(S)**
Lead and Inorganic Compounds	NL	R	2A	Lung, Stomach, Liver, Kidney

TERMS

OSHA—Occupational Safety & Health Administration

Y = Listed as a Human Carcinogen

NTP—National Toxicology Program

K = Known to be a Human Carcinogen

R = Reasonably Anticipated to be a Human Carcinogen (RAHC)

IARC—International Agency for Research on Cancer

1 = Carcinogenic to Humans

2A = Probably Carcinogenic to Humans

2B = Possibly Carcinogenic to Humans

3 = Unclassifiable as to Carcinogenicity in Humans

4 = Probably not Carcinogenic to Humans

Other

NL = Not Listed

12. ECOLOGICAL INFORMATION

ECOTOXICITY
Not applicable

PERSISTENCE AND DEGRADABILITY
Not applicable

BIOACCUMULATION POTENTIAL
Not applicable

MOBILITY IN SOIL
Not applicable

OTHER ADVERSE EFFECTS
Not applicable

13. DISPOSAL CONSIDERATIONS

Recover or recycle if possible. Dispose of according to local, regional, national and international regulations. Dust collected from machining, etc. may be classified as hazardous. Consult authorities before disposing.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT)-HMR (Hazardous Materials Registration)
Not Regulated

CANADIAN TRANSPORTATION OF DANGEROUS GOODS (TDG)
Not regulated

UN SHIPPING NAME
Not regulated

UN NUMBER
Not regulated

TRANSPORT HAZARD CLASS
Not regulated

PACKING GROUP
Not regulated

ENVIRONMENTAL HAZARDS
None

LABEL(S) REQUIRED
Yes

TRANSPORT IN BULK
Not applicable

SPECIAL SHIPPING INFORMATION
Not applicable

15. REGULATORY INFORMATION

US-OSHA (Hazard Communication Standard)

References: 29 CFR 1910.1200 Hazard Communication Standard
29 CFR 1910.1000 Air Contaminants
29 CFR 1910.1025 Lead

Dust or fumes generated by melting, machining, grinding, or welding may produce airborne contaminants, such as antimony, copper, lead and tin.

US-EPA (Toxic Substances Control Act–TSCA)

All components of these products are on the TSCA inventory list or are excluded from listing.

US-EPA (SARA Title III)

Releases to the environment of **Copper and Lead (fume or dust)** may be subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CANADA-WHMIS (Workplace Hazardous Materials Information System)

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

CANADA DSL (Domestic Substances List) Inventory Status

All components of these products are on the DSL Inventory.

CEPA (Canadian Environmental Protection Act)

Lead is on the Toxic Substances List.

EINECS No. (European Inventory of Existing Commercial Chemical Substances)

All components of these products are on the EINECS list.

RoHS (Restriction of Certain Hazardous Substances) Compliance

Complies with RoHS

CALIFORNIA PROPOSITION 65 Compliance

WARNING: This product contains or produces chemicals known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code 25248.5 et seq.)

US STATE REGULATORY INFORMATION

Some of the components listed in Section 3 may be covered under specific state regulations**.**

16. OTHER INFORMATION

Prepared By: Scott A. Reid

Date Issued: 6/1/2015

Revision Date: None

NOTE

Information presented herein has been compiled from sources considered to be reliable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so.The data given is designed for guidance during handling, processing, storage, transportation, disposal and release and is not to be considered a warranty. Each user should review the recommendations in specific context of the intended use and determine if they are appropriate.