



**MAGNOLIA
METAL
CORPORATION**

MATERIAL SAFETY DATA SHEET

NO. 4 REV. NO. 7

Date Prepared January 1, 2001

I. PRODUCT IDENTIFICATION

This MSDS supplied for :

Trade Name Magnolia Tin Base Babbitts
Generic Name Tin Base Babbitts

Manufacturer: Magnolia Metal Corporation
R.R. 2 Box 13M Magnolia Park
Auburn, Nebraska 68305

Telephone: (402) 274-3152

FIRE HAZARD CLASS: HEALTH : 0 FIRE : 0 REACTIVITY : 0

THE 4TH DIAMOND:

ANSI: WARNING! FUMES OR DUST FROM THIS INGOT MAY CAUSE RESPIRATORY OR SKIN IRRITATIONS, ANEMIA, OR METAL FUME FEVER. ANTIMONY AND ITS COMPOUNDS HAVE BEEN IDENTIFIED AS POTENTIAL CANCER CAUSING AGENTS.

II. PRODUCT INGREDIENTS

<u>Ingredient</u>	<u>CAS No.</u>	<u>Percent</u>	<u>TLV</u>	<u>PEL</u>
Tin	7440-31-5	80.0-92.0	2.0 mg/cu.m	2.0 mg/cu.m
Antimony*	7440-36-0	4.0-14.0	0.5 mg/cu.m	0.5 mg/cu.m
Copper*	7440-50-8	3.0- 8.5	0.2 mg.m as fume 1.0 mg.m as dust	0.1 mg.m as fume 1.0 mg.m as dust

N/E : none established

N/A : not applicable

N/D : no data available

There are no chemical hazards from these ingots in solid form.

Antimony and its compounds have been identified as potential cancer causing agents.

* This constituent, a toxic chemical, makes this product subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Quantity threshold for these chemicals, below which reporting of releases is not required is 25,000 pounds.

SECTION III - PHYSICAL DATA

Physical Description : Solid metal, yellow to white metallic in color, no odor

Boiling Point : 2270 F (for tin)

Vapor Pressure : N/A

Vapor Density :N/A

Solubility In Water : not soluble

Specific Gravity : 7.29 (for tin)

Percent Volatile By Volume : None

Evaporation Rate : N/A

SECTION IV - FIRE AND EXPLOSION DATA

Ingots will not burn or explode.

Finely divided Tin dust may form explosive mixtures with air. Flammable limits in air (% by Volume): Tin Dust 0.19 oz./cu.ft.

SECTION V - HEALTH HAZARD DATA

OVERVIEW

Melting, machining, grinding, flame cutting or welding of this material will put contaminants, primarily tin, antimony and copper, in the air.

Fumes and dusts from the ingots irritate the nose and throat. If too much fume is inhaled, it will cause a sweet or metallic taste in the mouth. High concentrations of the fumes can also cause metal fume fever, which resembles the flu. Stannosis, a benign pneumoconiosis, may result from chronic tin exposure.

Antimony and its compounds are irritating to the skin and mucous membranes and are systemic poisons. Symptoms include metallic taste in mouth, vomiting, colic, loss of appetite and weight and diarrhea. Dermatitis may result from repeated skin contact with antimony compounds. Chronic inhalation of antimony trioxide is reported to produce a reduction in white blood cells and damage to the liver.

Inhaling excessive amounts of dust from ingots over a long period of time can cause anemia. The dust from this ingot may also cause skin and eye irritation after short exposures.

Because of this potential hazard from metal dust and fumes; melting, machining, grinding welding operations, etc. should be done under local exhaust ventilation. If ventilation is not adequate, wear a NIOSH approved dust and fume respirator. In addition, good hygiene practices should be followed. Keep work area clean. Wash hands thoroughly before smoking, eating or drinking.

Other toxic metals in the alloy are present in small amounts that will not represent a hazard if tin, antimony and copper dusts and fumes are adequately controlled.

SECTION VI - REACTIVITY DATA

Hazardous Polymerization : Will not occur.

Stability : Stable.

Incompatibility : Contact with hydrogen peroxide may cause a violent reaction. Bromine, chlorine plus heat, sodium or potassium peroxides or perchloric acid may react with incandescence, heat or explosion. Antimony is spontaneously flammable in chlorine, fluorine, or bromine. With any alkali nitrate and heat explosion may result.

SECTION VII - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

If damaged, return material to vendor or send to scrap reclaimer.

Collected dust from machining, welding, etc. may be classed as a "hazardous waste" depending on circumstances.

Consult local authorities regarding disposal.

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED

Respiratory Protection : Wear a NIOSH approved respirator for dusts or fume if concentrations exceed the TLV or PEL.

Ventilation : Provide general ventilation and/or local exhaust if necessary to maintain concentrations below the TLVs.

Protective Gloves : Work gloves advisable for handling castings.

Eye Protection : Safety glasses with side shields and/or face shields for particles (grinding). Welding goggles or helmet for welding.

Other Protective Equipment : Wear a protective apron and gauntlets if arc-air gouging or cutting or welding on castings. If noise is at or above 90 dBA you should wear ear muffs or ear plugs.

SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage : No special precautions.

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.

FIRST AID

If In Eyes : Metal particles should be removed by trained individuals such as a nurse or physician.

If On Skin : Use a mild hand cream if irritation develops.

If Breathed : (Fumes from welding) Move to fresh air.

If Swallowed : N/A

N/E : none established

N/A : not applicable

N/D : no data available