US – OSHA SAFETY DATA SHEET

Issue Date: 4/2/2015 **Revision Date:** 8/27/18

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Tin, Copper, Nickel Babbitt**

OTHER PRODUCT NAMES: 4 X Nickel Babbitt

MANUFACTURER: Mayco Industries
18 West Oxmoor Road
Birmingham, AL 35209
205-942-4242

EMERGENCY TELEPHONE NUMBERS: Chemtel – 800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:

Category	Hazard and Precautionary Statements	
Health	H302	Harmful if swallowed
Acute Toxicity – Category 4	H332	Harmful if inhaled
Reproductive – Category 1A	H360df	May damage fertility or unborn child
Carcinogenicity – Category 2	H373	May cause damage to the central nervous system and
Specific Target Organ Toxicity – Category 1		systems for reproduction organs through prolonged or repeated exposure
	P201	Obtain special instructions before use
	P202	Do not handle until all safety precautions have been read and understood
	P260	Do not breathe dust/vapors
	P281	Use personal protective equipment as required
	P308 + P313	If exposed or concerned, get medical advice/attention
Environmental	H400	Very toxic to aquatic life
Aquatic Chronic – 1	H410	Very toxic to aquatic life with long lasting effects
Aquatic Acute – 1		
Handling	P405	Store locked up
	P501	Dispose of contents/container in accordance with local/regional/national/international regulations

GHS Label: Lead Products

Signal Word: DANGER!

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Specialty alloy

Material	% by Wt.	CAS #	OSHA EXPOSURE LIMIT
Tin	86 – 90	7440-31-5	2.00 mg/cubic meter
Antimony	8 – 10	7440-36-0	0.50 mg/cubic meter
Copper	3 – 5	7440-50-8	0.10 mg/cubic meter
Nickel	0 – 1	7440-02-0	1.00 mg/cubic meter

SECTION 4: FIRST AID MEASURES

Eye Contact: Remove contact lenses if applicable and flush eyes with water for at least 15 minutes.
Skin Contact: Wash skin thoroughly. If contact with molten metal, cool skin rapidly and seek medical assistance.
Ingestion: Do not induce vomiting. Call poison control center or doctor.
Inhalation: Remove from exposure and rest in a position comfortable for breathing.
Important Symptoms & Effects, Acute & Delayed: Antimony causes nasal septal ulceration and stomach lining irritation. Tin is not regarded as toxic but excessive exposure can cause fever, nausea, stomach cramps or diarrhea.
Indication of Medical Attention: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: Not Applicable
Flammable Limits: Not Applicable
Extinguishing Media: Dry chemical, foam or CO2. Do not use water when molten metal is present.
Hazards Combustion Products: Molten metals produce fume, vapor and or dust that may be toxic and/or respiratory irritants.
Fire Fighting Procedures: Use full-body protective clothing. Wear self-contained, full-face, positive pressure breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Allow metal to cool and solidify if molten. Place spilled materials in dry, closed containers for proper disposal or recycling. Do not dry sweep or use compressed air.

SECTION 7: HANDLING AND STORAGE

Handling: Wear personal protective equipment as necessary and recommended in Section 8. Wash exposed skin with soap and water after handling.
Storage: Store away from strong acids, oxidizers, reducing agents, halogens.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Tin 7440-31-5	TWA: 2.0 mg/m³Sn	TWA: 2.0 mg/m³Sn	IDLH: 100 mg/m³Pb TWA: 2.0 mg/m³Pb
Antimony 7440-36-0	TWA: 0.5 mg/m³Sb	TWA: 0.5 mg/m³Sb	IDLH: 0.50 mg/m³Sb TWA: 0.50 mg/m³Sb
Copper 7440-50-8	TWA: 1.0 mg/m³Cu	TWA: 1.0 mg/m³Cu	IDLH: 2000 mg/m³Cu TWA: 1.0 mg/m³Cu
Nickel 7440-02-0	TWA: 1.0 mg/m³Ni	TWA: 1.0 mg/m³Ni	IDLH: 10 mg/m³Ni TWA: 0.015 mg/m³Ni

Engineering Controls: Handle and process in well-ventilated areas. Ensure that dust-handling systems are designed in a manner to prevent the escape of dust/fume into the work area. Emergency eyewash stations and safety showers should be available in the immediate vicinity of use. Ensure compliance with local/regional/national/international regulations.

Personal Protective Equipment: Protective goggles, gloves, and clothing, as needed. Respiratory protection, as necessary when exposures are unknown or above the PEL.
Eye/Face Protection: Use safety glasses with side shields or chemical goggles.
Skin and Body Protection: Not normally needed.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn as appropriate for protection from toxic dust.
General Hygiene Considerations: Do not eat, drink, smoke or apply cosmetics when using this product. Thoroughly wash face, hands and other exposed skin after handling or processing. Contaminated work clothing should not be allowed outside the workplace except for disposal or laundering.

SECTOPM 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid
Appearance: Metallic, faint grey
Odor: N/A
pH: N/A
Melting point: 460°F approx.
Boiling point: N/A
Boiling range: N/A
Flash Point: N/A
Evaporation rate: N/A
Flammability: N/A
Upper/Lower flammability limit: N/A
Upper/Lower flammability limit: N/A
Molecular weight: N/A
Viscosity: N/A
Decomposition temperature: N/A
Auto ignition temperature: N/A
Partition coefficient: N/A
Solubility: N/A
Specific Gravity (Relative Density): 7.3 approx.
Vapor density: N/A
Vapor density: N/A
Vapor pressure: N/A

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions.
Chemical Stability: Stable under normal conditions.
Possible Hazardous Reactions: None under normal processing.
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to Avoid: Incompatible materials
Incompatible Materials: Strong acids, oxidizing, reducing agents, halogens.
Hazardous Decomposition Products: Antimonial fumes at high temperatures.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Hazardous exposure can occur when the product is heated, oxidized or otherwise processed or damaged to create dust, vapor or fume. Main routes of exposure include ingestion and inhalation.
Chronic and Acute Related Symptoms/Effects: Antimony metal granules or dust may cause skin irritation by mechanical action. Can irritate eyes by mechanical action. Inhalation of dust and fumes must be avoided. Ingestion of dust and fumes must be avoided. Antimony is toxic and dust fume can cause nasal septal ulceration and stomach lining irritation. Tin is not regarded as toxic but excessive exposure can cause fever, nausea, stomach cramps or diarrhea.
Measures of Toxicity:
0% of the mixture consists of ingredient(s) of unknown toxicity.
Carcinogenic Effects:
May cause cancer. Antimony is listed as a category 2 carcinogen, likely in animals at extreme doses. Proof of carcinogenicity in humans is currently lacking.
IARC Group: 2B
National Toxicology Program (NTP) Status: Nickel Group 2
Additional Health Data: Heavy metals, such as antimony, are taken into the body primarily by inhalation and ingestions. Most inhalation problems can be avoided with adequate precautions such as ventilation and respiratory protection. Follow good personal hygiene practices to avoid inhalation and incidental ingestions. Wash before eating, smoking or leaving the work site. Keep contaminated clothing and PPE out of non-contaminated areas. Do not allow contaminated clothing of PPE to be taken home. These products are intended for professional and industrial uses and should be isolated from children and their environment.

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate: Toxic to aquatic life and terrestrial environments.
Bioaccumulation Potential: Metal powders in water or soil may form metal oxides or other metal compounds that could become bioavailable and harm aquatic or terrestrial organisms.
Mobility in Soil: Metal powder would be relatively immobile in soils but some metal compounds may be transported with ground water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste materials or by-products formed during handling or processing, and contaminated packaging should be properly characterized and disposed in accordance with applicable local/regional/national/international rules and regulations or recycled as appropriate. Consult local, state or federal environmental agencies for applicable requirements.

SECTION 14: TRANSPORT INFORMATION

This products covered by this Safety Data Sheet are not subject to DOT regulation. Waste materials or by-products formed during handling or processing or due to damage may be subject to regulation. Consult DOT for applicable requirements.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No.	Weight - %	SARA 313 – Threshold Values %
Tin	7440-31-5	86 – 90	Not Listed
Antimony	7440-36-0	8 – 10	1.0
Copper	7440-50-8	3 – 5	1.0
Nickel	7440-02-0	0 – 1	0.1

SARA 311/312 Hazard Categories
Acute Health Hazard Yes
Chronic Health Hazard Yes
CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Tin 7440-31-5	-	-	-	-
Antimony – 7440-36-0	5000 lb.	X	X	X
Copper – 7440-50-8	1 lb.	-	X	X
Nickel – 7440-02-0	100 lb.	X	X	X

US State Regulations

California Proposition 65 “WARNING”

This product can expose you to chemicals including Lead and Nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. Form more information go to www.P65Warnings.ca.gov.

Chemical Name	California Proposition 65
Tin – 7440-31-5	Not Listed
Antimony – 7440-36-0	Cancer
Copper – 7440-50-8	Not Listed
Nickel – 7440-02-0	Cancer

US State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Tin – 7440-31-5	X	-	X	-	-
Antimony – 7440-36-0	X	-	X	-	X
Copper – 7440-50-8	X	X	X	-	-
Nickel – 7440-02-0	X	X	X	-	-

16. OTHER INFORMATION

Issue Date: 02-April-2015

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Revision Note: More concise information. Corrected transport information. Minor reformatting.

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