MUELLER BRASS CO.

C35300

Material Safety Data Sheet

Section 1 – Manufacturer's Identification

Company	Issue Date	Identification Number
Mueller Brass Co. 302 Ashfield Street / 2199 Lapeer Ave. Belding, MI 48809/Port Huron MI.48060	03/12//12	
Trade Name (Common Name or Synonym) Leaded Brass	Emergency Phone Number 616.794.1200 810.987.7770	Information Phone # (EHS Manager) 616.794.4866 810.987.7770
Chemical Name Copper –Zinc-Lead Alloy	Formula Alloy	DOT Identification Number N/A

Section 2 - Ingredients

Material or Compound

Compound	CAS Number	% Composition by Weight
Copper	7440-50-8	60.0 - 63.0
Zinc	7440-66-6	REMAINDER
Lead	7439-92-1	1.5 – 2.5
Iron	7439-89-6	.15 Max.

Section 3 – Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H2O = 1)	Approx 8.47
Vapor Pressure (mm Hg)	N/A	Melting Point	1670 deg F
PH	N/A	Solid	1630 deg F
Solubility in Water Negligible			
Appearance and Odor Yellow to Gold in color and has no odor			

Section 4 – Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits N/A	Auto Ignition Temperature N/A	Extinguishing Media N/A
Extinguishing Media N/A			

Section 5 – Reactivity Data

Stability	Unstable	Conditions to Avoid	
	Stable XXX		
Incompatibility (Materials to Avoid) Material reacts with acids, bases and oxidizers			
Hazardous Decomposition or Byproducts Nitrogen Oxide fumes with contact with Nitric Acid			
		Conditions to Avoid Contact between metal and acids.	

Section 6 – Health Hazard Data

Route(s) of Entry	Inhalation? Not applicable for material	Eyes? Flush with water –consult physician	Ingestion? Not Likely

	as shipped – with inhalation of metal dust during machining. Remove to fresh air and consult physician	Skin? N/A	Occupational Exposure Limits: N/A
Emergency and First Aid Procedures Flush with water for first aid treatment. Contact physician if further treatment is necessary			
Waste Disposal Method Waste or residue from this material must be disposed of in accordance with Federal, State and Local Laws.			

Section 8 – Control Measures

Respiratory Protection (Specify Type) Protective devices may be required for normal machining which generates metal fines or chips.		
PPE	Hand, arms, and Body Wear appropriate hand and body Protection such as gloves, aprons, etc.	Eye and Face Wear suitable eye protection i.e.: safety glasses, goggles, face shield.
	Other No special clothing required for normal machining operations.	

Section 9 – Prepared By

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Safety / Environmental Manager
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HEALTH HAZARD DATA

HEALTH HAZARDS (SHORT TERM AND LONG TERM)

COPPER: Inhalation of copper fumes or dust may cause metal fume fever and damage to nasal membranes. The skin and hair may turn green in severe cases. Skin and eye irritation may occur. Skin sensitization may occur. Chronic exposure may cause Wilson's disease which is characterized by damage to the blood cells, brain, kidneys, liver and pancreas. Copper fragments left in the cornea may cause cataracts. Copper fragments that penetrate the eye may cause irreversible eye damage if not removed immediately.

LEAD: Lead has been shown to cause birth defects and tumors of the kidneys and lungs in animal tests. It also is a cumulative central nervous system poison.

ZINC: Zinc itself poses little health risk. It has been shown to cause eye, skin, and respiratory irritation. Freshly formed zinc oxide fumes causes a form of metal fume fever.

SIGNS AND SYMPTOMS OF EXPOSURE

COPPER: Metal fume fever is characterized by a dry irritated throat, chills, fever, and elevated white blood cell count, and general flu-like symptoms. Skin, eye, and nasal irritation and skin sensitization are characterized by pain, swelling, and reddening of the affected tissue. Wilson's disease is characterized by weakness, anemia, abdominal pain, and yellowing of the skin or jaundice.

LEAD: Chronic lead poisoning is characterized by a metallic taste in the mouth, a dark lead line at the base of the teeth, abdominal pain, diarrhea, loss of appetite, nausea, vomiting, insomnia, weakness, joint and muscle pain, irritability, headaches, dizziness, loss of weight, stupor, convulsions, and loss of consciousness.

ZINC: Skin and eye irritation are characterized by pain, swelling, and reddening of the affected tissue. Respiratory irritation is characterized by coughing and pain in the nose and throat. Zinc fume fever is characterized by a sweet taste in the mouth, dry throat, cough, weakness, generalized body aches, fever, nausea, and vomiting.