JME ELLSWORTH
A John M. Ellsworth Company
John M. Ellsworth Co., Inc.
P.O. Box 240072
8700 West Bradley Road
Milwaukee, WI 53224
800·333·3331 PHONE
info@jmesales.com E-MAIL
www.JMEsales.com WEB

C36000

Material Safety Data Sheet

Section 1 – Manufacturer's Identification

	Issue Date 03/12/12	Identification Number
Trade Name (Common Name or Synonym) Leaded Brass		
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	2.5 - 3.0
Iron	7439-89-6	.35 Max.

Section 3 – Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H2O = 1)	Approx 8.5
Vapor Pressure (mm Hg)	N/A	Melting Point	1650 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 as shipped – with inhalation of metal dust during	Eyes? Flush with water –consult physician Skin? N/A	Ingestion? Not Likely Occupational Exposure Limits: N/A

	machining. Remove to fresh air and consult physicial		
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 ie: safety glasses, goggles, face shield.
	Other No special clothing required for normal machining operations.	

Section 9 – Prepared By

Laura Shears
Mueller Brass
Safety / Environmental Manager
616.794.4866

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 cause 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.