



MATERIAL SAFETY DATA SHEET

MSDS No. 003 Lead Free Brass Pipe Fittings

The Top Brass with a Stainless Reputation!

PRODUCT IDENTITY: Brass Pipe Fittings Bismuth Tin Bronze No. C89833 **MSDS No:** 003

SECTION 1 - Product and Company Identification

DISTRIBUTOR: Merit Brass Company MANUFACTURER: Various
EMERGENCY TELEPHONE NUMBER: 1-216-261-9800 or 1-800-726-9800
ADDRESS: One Merit Drive - P.O. Box 43127, Cleveland, Ohio 44143
TELEPHONE NUMBER FOR INFORMATION: 1-216-261-9800 or 1-800-726-9800



CHEMICAL NAME AND SYNONYMS: Brass Alloy Fittings ASTM B584-08a; Bismuth Tin Bronze C89833

COMPANY CONTACT: Thomas J. Golenski, Production Manager

SECTION 2 - Hazardous Ingredients

ELEMENT	CAS NO.	% RANGE	OSHA PEL (mg/M ³)	ACGIH TLV (mg/M ³)
Aluminum	7429-90-5	.005 Max	5 respirable dust, 15 total dust	1
Antimony	7440-36-0	.25 Max	0.5	0.5
Bismuth	7440-69-9	1.70 to 2.70	5 respirable dust, 15 total dust	3 respirable dust, 10 total dust
Copper	7440-50-8	86 to 91	0.1 fume, 1 dust	0.2 fume, 1 dust
Iron (as oxide)	7439-89-6	0.30 Max	10 fume	5
Lead	7439-92-1	0.09 Max	0.05	0.05
Nickel	7440-02-0	1 Max	1	1.5
Silicon	7440-21-3	.005 Max	5 respirable dust, 15 total dust	10
Sulfur (as dust)	7704-34-9	.08 Max	5 respirable dust, 15 total dust	3 respirable dust, 10 total dust
Tin	7440-31-5	4 to 6	2	2
Zinc (as oxide)	7440-66-6	2 to 6	5 respirable dust, 15 total dust	2 fume, 10 total dust

SECTION 3 - Physical Data

MELTING POINT: 1580 to 1885° F

SPECIFIC GRAVITY: 8.78 g/cc

BOILING POINT: Not Applicable

VAPOR PRESSURE: Not Applicable

Bronze is a shiny yellow-golden colored metallic solid, it has no odor, and is not soluble in water.

SECTION 3 - Fire & Explosion Data

FLASH POINT: Not Applicable

EXTINGUISHING MEDIA: Water spray or ABC dry chemical

AUTO-IGNITION TEMPERATURE: Not Applicable

NATIONAL FIRE PROTECTION ASSOCIATION DATA:

FLAMMABLE LIMITS: LEL N/A UEL N/A

Health - 1 Flammability - 0
Reactivity - 1 Special - None

SPECIAL FIRE FIGHTING PROCEDURES: None when solid.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not use water on molten metal.





MSDS No. 003 Lead Free Brass Pipe Fittings

SECTION 5 - Health Hazard Data

THRESHOLD LIMIT VALUE: See SECTION 2 - HAZARDOUS INGREDIENTS

EFFECTS OF OVEREXPOSURE: No adverse health effects when handling intact parts; wash hands before eating to prevent ingestion of minute amounts of toxic metal that may accumulate in the body. Exposure to bronze grinding dust and brazing fumes may cause the cold-like symptoms of metal fume fever; metallic taste in mouth, chills, fever, dry mouth and throat, headache. Copper fumes may cause the discoloration of skin and hair.

EMERGENCY AND FIRST AID PROCEDURES: In all cases seek medical assistance.

INHALATION - Remove person with symptoms to fresh air, thoroughly shower, and change cloths.

INGESTION - Seek medical assistance.

EYE - Flush with clean water for thirty minutes.

SKIN - Wash thoroughly with soap and water.

SECTION 6 - Reactivity Data

STABILITY: Bronze metal is stable at room temperature.

INCOMPATIBILITY: (Materials to avoid) Strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Flammable or toxic gases may evolve when brass is exposed to acids or bases.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Do not use bronze pipe and fittings to transport corrosive liquids.

SECTION 7 - Spill or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Bronze parts spills should constitute only a trip and fall hazard.

WASTE DISPOSAL METHOD: Bronze metal is valuable and may be recycled by foundries and secondary metal smelters. Avoid melting bronze chips covered with metal cutting oil since this will cause fugitive emissions of dense smoke into the air.

SECTION 8 - Special Protection Information

RESPIRATORY PROTECTION: Use a NIOSH approved HEPA respirator when melting, brazing, or grinding brass metal. (*Specify type in accordance with the concentration of toxic particles in the air and work conditions.*)

VENTILATION: Local exhaust ventilation is recommended when melting, brazing, or grinding bronze metal.

EYE PROTECTION: Wear appropriate eye protection when melting, brazing, soldering, cutting, or grinding bronze metal.

PROTECTIVE GLOVES: Use cotton work glove to prevent transfer of metal to skin. Use cut resistant gloves when handling metal chips. Use heat resistant gloves or tongs to handle hot parts.

OTHER PROTECTIVE EQUIPMENT: Wear clothing appropriate to the fabrication operation attempted with this product.

SECTION 9 - Special Precautions

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Protect bronze parts from moisture to avoid discoloration and corrosion.

OTHER PRECAUTIONS: Never place wet bronze parts into a melting furnace - explosion hazard.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy themselves as to the suitability or completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this product either singly or in combination with other substances. This MSDS is equivalent to OSHA Form 20.