



ISOSTATIC

LEADERS IN BRONZE BEARINGS...and MORE

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To: ISOSTATIC INDUSTRIES, INC. CUSTOMERS

Attn: SAFETY DIRECTOR

Subject: MATERIAL SAFETY DATA SHEET HAZARDOUS MATERIAL
AS DEFINED IN 29 CFR 1910.1200

Enclosed are copies of our Hazard Communication Sheets covering parts sold by Isostatic Industries, Inc.

We feel these parts, in their manufactured state, are not hazardous in shipping or sitting on a shelf.

However, subsequent machining, drilling, melting, etc. could cause hazardous conditions as described on the enclosed data sheet.

We believe our Hazard Communication Sheets to be accurate and comply with the Federal Occupational Safety Communication Standard CFR 1910.1200.

If additional copies of the Material Safety Data Sheets are required, please feel free to request them.

Material safety data sheet

OILUBE® POWDERED METAL

Section I. Ingredients

Hazardous Ingredients:	OSHA	ACGIH	UNITS NOTATIONS
Copper (8CI9CI)	1	1	MG/M3
Copper (8CI9CI)			
Tin (8CI9CI)	2	2	MG/M3
Tin (8CI9CI)			
Distillates (Petroleum), solvent-refined heavy paraffinic	5	5	MG/M3
Distillates (Petroleum), solvent-refined heavy paraffinic			

Generis Description: Powdered Metal Part, impregnated with oil
 For explanation of "Notations," see the Hazard Communication Sheet Explanation page.

Section II. PHYSICAL DATA

Boiling Point:	635F	Solubility in Water	Negligible (< 0.1%)
Vapor Pressure:	< 0 MM HG AT 20F	Evaporation Rate:	> 1.000 REF=: Water
Vapor Density:	N/AP	Specific Gravity:	N/AP
PH at Full Strength:	N/AP	PH at Rec. Dilution:	N/AP
Appearance & Odor:	Bronze solid-slight odor	% Volatile by Vol:	0

Section III. FIRE AND EXPLOSION DATA

Flash Point:	Ignition Temp:	LEL:
425F COC	N/AV	N/AV

Special Fire & Explosion Hazards:	Comment not applicable.
Extinguishing Media:	Water fog. Dry compound. Foam or carbon dioxide.
Special Firefighting Procedures:	Use self-contained breathing apparatus for enclosed areas.

Section IV. HEALTH HAZARD DATA

Effects of Overexposure – Acute & Chronic:

Skin Contact: Prolonged contact may produce defatting and drying of skin.

Inhalation: If product is ground, sanded or drilled, dust released from it may produce irritation of upper respiratory tract, if product is welded or brazed fumes may cause metal fume fever (a temporary condition caused by exposure to sufficient amounts of a freshly formed metal oxide fume- its symptoms include dryness/irritation of the throat, cough, shortness of breath, weakness, fatigue, pains in joints and muscles, high fever, chills and sweats).

Emergency First Aid Procedures:

Skin Contact: Wash with soap and water. Apply skin cream if defatting of skin occurs.

Inhalation: Remove to fresh air at once

Section V. REACTIVITY DATA

Stability:	Stable
Conditions to Avoid:	Comment not applicable
Materials to Avoid:	Strong oxidizing agents
Hazardous Polymerization:	Will not occur
Polymerization Condition to Avoid:	Comment not applicable
Hazardous Decomposition Products:	Carbon monoxide, metal fumes

Section VI. SPILL OR LEAK PROCEDURES

Steps to be Taken if Material Is Released or Spilled: Recover Material if possible.

Waste Disposal Methods: Dispose of in a manner consistent with state, local, and federal regulations

Section VII. SPECIAL PROTECTION

Respiratory Protection: No special protection needed under normal conditions. When welding, cutting or brazing or if dust is generated while handling, fume, dust and mist respirator may be required.

Ventilation Type: General ventilation if needed.

Protective Gloves: Recommended. Oil resistant gloves if needed.

Eye protection: Recommended. Safety Glasses.

Other Protective Equip.: Comment not applicable.

Section VIII. SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling & Storage: Comment not applicable.

Other Precautionary Measures: Comment not applicable

Section IX. WASTE LABELING INFORMATION

DOT Labeling Information (49 CFR 100-199)

Not hazardous per DOT regulations

RCRA Information (40 CFR 122-124, 260-265)

Hazardous Waste Numbers: N/AP

Hazard Codes: N/AP

The above information is based on data provided by suppliers and is not based on laboratory analysis. Testing is recommended

HAZARD COMMUNICATION SHEET EXPLANATIONS

This explanation page is intended to accompany hazard communication sheets as an aid to their understanding and interpretation.

SECTION I. HAZARDOUS INGREDIENTS

The format for each hazardous ingredient is as follows: 2 names are listed. The first is the common name, while the chemical name is given on the line below the common name, indented several spaces.

Some ingredient names appear in the following manner: chemical name (8CI9CI). The 8CI9CI means that the name of the chemical was derived from the eighth and ninth collective indexes (CI) of chemical abstracts compiled by the American Chemical Society.

S = *Skin notations*, which means that the substance may be absorbed through the skin, contributing to a person's overall exposure level.

C = *Ceiling value*, which is the airborne concentration of a substance above which someone may not be exposed for even an instant.

OSHA and ACGIH = These values represent the airborne concentration of a substance to which the average person may be exposed for 8 hours per day, for 40 hours per week, without any adverse health effects. The OSHA value or PEL (Permissible Exposure Limit), is the legal limit as defined by the Occupational Safety and Health Administration (OSHA). The ACGIH value, or TLV (Threshold Limit Value), is the level recommended by the American Conference of Governmental Industrial Hygienists (ACGIH).

I1, I2A, I2B are designations given by the International Agency for Research on Cancer (IARC) to potential cancer-causing substances:

I1 = *Human Positive*, which means that there is sufficient evidence from population studies to show that the substance causes cancer in humans.

I2A = *Human Suspected*, which means that evidence from human population studies suggests that the substance may cause cancer, but the results are not completely clear. It is possible that the results could have been caused by something other than the substance in question.

I2B = *Animal Positive*, which means that scientific studies have shown the substance to cause an increased occurrence of cancer in multiple animal species or strains, or in multiple experiments.

N1 and N2 are designations given by the National Toxicology Program (NTP) to potential cancer-causing substances:

N1 = *Known Carcinogens*. Evidence from human population studies indicates that exposure to the substance causes cancer in humans.

N2 = *Reasonably Anticipated to be Carcinogens*. Those substances for which there is some limited evidence that the substance causes cancer in humans or sufficient evidence that the substance causes cancer in experimental animals.

O1 is the designation given by the Occupational Safety and Health Administration (OSHA) to suspected cancer-causing substances as listed in 29CFR 1910.1001-1010.1017 – "Cancer-Suspect Agents."

GENERALLY:

N/AV = The information is not available at this time.

N/AP = This question does not apply to this product (example: an asbestos containing brake pad does not have a boiling so the correct response to boiling point on an MSDS for this brake pad is N/AP).