Marmetal Industries, Inc.

MATERIAL SAFETY DATA SHEET

Date: May 15, 1986

Supersedes Date:

SECTION I

Name: MARMETAL INDUSTRIES, INC.

Address: 903 Sheehy Drive, Horsham, Pa 19044

Emergency Phone No.: 215-675-4645

Identity (as used on label): 706,710,715,71580

CDA Designation: C70600, C71000, C71500, C71580

SECTION II—HAZARDOUS INGREDIENTS

Chemical Name	CAS Registry No.	Percent by Weight
Copper	7440-50-8	66.2–86.6
Zinc	7440-66-6	1.0 Max.
Iron	7439-89-6	0.70–1.4
Nickel	7440-02-0	10.0–31.0
Manganese	7439-96-5	1.0 Max.

Note: The copper and copper alloy products as sold by Revere Copper Products, Inc. are in solid form and will not result in an environmental exposure in such form. We cannot anticipate all the processes or applications to which this product might be subjected or which might create exposures. The information supplied has been furnished by our suppliers and consequently, Revere Copper Products, Inc. assumes no responsibility for the accuracy or completeness of the data contained herein.

SECTION III—PHYSICAL DATA

	Alloy:	706	710	715	71580
Melting Point (°F)		2100	2190	2260	2260
Specific Gravity (H_20 = 1)		8.94	8.94	8.94	8.94
Solubility in Water	Negligible				

SECTION IV—FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) Not Applicable

Extinguishing Media Dry Sand or Metal Extinguishing Powders

Special Fire Fighting Procedures Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in fire.

Unusual Fire and Explosion Hazards Do not use water on molten metals. Grinding or other machining operations can produce fine particulate dust which may explode in the presence of a strong ignition source.

SECTION V—HEALTH HAZARD DATA

Threshold Limit Value:

Copper: Fume—0.1 mg/m³; Dust & Mist—1.0 mg/m³. Zinc: Oxide Fume—5 mg/m³. Iron: Oxide Fume—10 mg/m³. Nickel: 1 mg/m³. Manganese: Fume—1 mg/m³; Dust—5 mg/m³ (ceiling).

Effect of Overdose:

Mechanical irritation of skin and eyes. Irritation to lining of stomach and intestines. Dry burning throat, headache, muscle aches, cough, chest tightness and pain, nausea, chills, fever, metallic taste.

Emergency and First Aid Procedures:

Skin: Flush thoroughly with water.
Eyes: Flush with water, call physician.
Ingestion: Induce vomiting in conscious person, call physician.
Inhalation: Remove victim to fresh air, call physician.

SECTION VI—REACTIVITY DATA

Stability—Stable

Incompatibility (material to avoid):

Hydrogen Peroxide, Acetylene, Chlorine, Halogenates of Barium, Calcium, Magnesium, Potassium, Sodium and Zinc.

Hazardous Decomposition Products:

At temperatures above the melting point metallic oxide fumes may be evolved.

Hazardous Polymerization—Will not occur.

SECTION VII—SPILL OR LEAK PROCEDURES

Steps To Be Taken in Case Material Is Released or Spilled:

A clean-up procedure which minimizes exposure is required. Vacuuming is preferred. Place material in closed containers. Do not use compressed air for cleaning. Use approved respiratory protection if possibility of dust, mist and/or fume exposure exists.

Waste Disposal Method:

Copper containing waste is normally collected to recover copper value. Should waste disposal be deemed necessary follow Federal, State and Local regulations.

SECTION VIII—SPECIAL PROTECTION INFORMATION

Respiratory Protection:

NIOSH/MSHA approved respirator for toxic dust, fume and/or mist.

Ventilation:

Exhaust dust, mist and/or fume at source if threshold limit values are exceeded.

Eye Protection:

Safety glasses or face shield.

SECTION IX—SPECIAL PRECAUTIONS

Precautions To Be Taken in Handling and Storing:

Avoid inhalation and ingestion of dust, fume and/or mist. Practice good housekeeping and personal hygiene procedures.