PREPARED BY DISTRIBUTOR:

Castle Metals®

A. M. Castle & Co.
3400 N. Wolf Road
Franklin Park, IL 60131

MATERIAL SAFETY DATA SHEET

(This product contains one or more toxic chemicals subject to the reporting requirements of section 313 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT of 1986 and of 40CFR72).

ISSUE DATE
November 25, 1985

REVISED
October 15, 2004

For Information or In An Emergency
Call: (847) 455-7111

Section 1 - Product Identification

Manufacturer's Name
Various

Product Name / Trade Name	Common Name / Grade
Copper - CR & HR Copper Leadtex Sheet	Copper Sheet, Oxygen Free, Hard Drawn Electrolytic Tough Pitch

Section 2 - Hazardous Ingredients

NOTE: Products Under Normal Conditions Do Not Represent An Inhalation, Ingestion or Contact Health Hazard.

Base Metal, Alloying Elements And Metallic Coatings	CAS#	WT % (1)	OSHA PEL (mg/g³) (3)	ACGIH TLV TWA (Unless Noted Otherwise) (mg/m³) (2)
Base Metal				
Copper (Cu)	7440-50-8	>99.9	1	1 (Dust & Mist)
Trace Less Than .1%				
Phosphorus (P)	7723-14-0	<0.1	0.1	0.1 (Yellow)
Antimony (Sb)		<0.1	0.5	0.5
Selenium (Se)		<0.1	0.2	0.2
Bismuth (Bi)	7440-69-9	<0.1	N.E.	N.E.
Coating - Leadtex				
Lead (Pb)	7439-92-1	l5 lbs/100 sq ft	.05	0.05 (Dust & Fume)

(1) % Of Alloying Material Varies With Grade Of Material.

(2) 1996 ACGIH Threshold Limit Value.
(3) 1993 OSHA Permissable Exposure Limit.

Section 3 - Physical Data

Material Is (At Normal Conditions)	Appearance and Odor
Solid	Copper Metallic, Odorless
Melting Point (Base Metal)	**Specific Gravity**
>1800º F	> 8

Section 4 - Fire And Explosion

Extinguishing Media
NA

Special Firefighting Procedures
Products in the solid state present no fire or explosion hazard.

Unusual Fire and Explosion Hazards
Dust hazard exists under favoring conditions of small particle size.
Dispersion in air and strong ignition source may result in an explosion.

Section 5 - Reactivity Data

Stability	Incompatability (Materials to Avoid)
Stable	Mercury, Ammonia, Acetylene, Acids

Conditions to Avoid
Exposure during storage to strong acids, bases or oxidizing agents.

Hazardous Decomposition Products
Toxic gases, aerosols and vapors may be released in a fire involving copper alloys if fumes of other compounds or other contacting materials are involved.

Product
Copper

Section 6 - Health Hazard Data

NOTE: STEEL PRODUCTS IN THE NATURAL STATE DO NOT PRESENT AN INHALATION, INGESTION OR CONTACT HAZARD. HOWEVER, OPERATIONS SUCH AS BURNING, WELDING, SAWING, BRAZING AND GRINDING MAY RELEASE FUMES AND/OR DUSTS WHICH MAY PRESENT HEALTH HAZARDS IF TLV'S ARE EXCEEDED

MAJOR EXPOSURE HAZARD

☒ **Inhalation** ☒ **Skin Contact** ☐ **Skin Absorption** ☐ **Eye Contact** ☒ **Ingestion**

Effects of Overexposure

Short term exposure to fumes/dust may produce irritation of eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes of copper and lead may cause metal fume fever characterized by a metallic taste in the mouth and irritation of the throat and influenzalike symptoms.

Inhalation or ingestion of lead particles may result in lead-induced systemic toxicity. Symptoms of lead poisoning include abdominal cramps, anemia, muscle weakness and headache. Prolonged exposure can cause behavioral changes, kidney damage, CNS damage and reproductive effects.

Suspected Cancer Agent? __X__ NO: This product's ingredients are not found in the lists below.
_____ YES: ____ Federal OSHA ____ NTP ____ IARC

Emergency and First Aid Procedures

If exposed to excessive levels of metal fumes, remove to fresh air, seek medical aid immediately.

Eyes - Flush with water for at least 15 minutes.

Section 7 - Spill or Leak Procedures

Spill or Leak Procedures

NA

Waste Disposal Methods

According to local, state and federal regulations

Section 8 - Special Protection

Respiratory

NIOSH/MSHA - Approved dust and fume, respirator should be used to avoid excessive inhalation of particulates when exposure exceeds TLV's.

Ventilation

Local exhaust ventilation should be utilized when welding, burning, sawing, brazing, grinding or machining when exposure exceeds TLV's.

Eye Protection and Protective Clothing

Safety glasses or goggles should be utilized as required by exposure. Other protective equipment should be utilized as required by the welding standards.

Section 9 - Special Precautions

In welding, precautions should be taken for airborne contaminants which may originate from components of the welding rod.

Arc or spark generated when welding or burning could be a source of ignition for combustible and flammable materials.

Data sheets of individual manufacturers may be obtained by contacting A. M. Castle & Co., 3400 N. Wolf Road, Franklin Park, IL 60131 Attn: Corp. Safety Mgr.