PREPARED BY DISTRIBUTOR:

Castle Metals®

A. M. CASTLE & CO.
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Franklin Park, IL 60131

MATERIAL SAFETY DATA SHEET

ISSUE DATE: November 25, 1985

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INFORMATION AND EMERGENCY NUMBER:
(312) 455-7111 (8am - 5pm Mon-Fri)
(312) 455-8986 (After Hour Emergency)

SECTION 1 - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: Various

PRODUCT NAME / TRADE NAME: Brass

COMMON NAME / GRADE: Half Hard, Soft, Shim, HR Naval, Muntz Free Cutting Leaded

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	ACGIH TLV (mg/m^3) (2)
Base Metal				
Copper (Cu)	7440-50-8	60-70	1	1 (Dust & Mist)
Alloying Elements				
Zinc (Zn)	7440-66-6	30-40	N.E.	5 (As Fume)
Tin (Sn)	7440-31-5	<1	2	2
Free Cutting Leaded				
Lead (Pb)	7439-92-1	<4	.05	.15 (Dust & Fume)

(1) % OF ALLOYING MATERIAL VARIES WITH GRADE OF MATERIAL.

(2) 1985-1986 ACGIH THRESHOLD LIMIT VALUE.

SECTION 3 - PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS): Solid

APPEARANCE AND ODOR: Gold/Yellow Colored, Odorless

MELTING POINT (BASE METAL): >1600 F

SPECIFIC GRAVITY: >8

SECTION 4 - FIRE AND EXPLOSION

EXTINGUISHING MEDIA: NA

SPECIAL FIRE FIGHTING PROCEDURES: Steel products in the solid state present no fire or explosion hazard.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Dust hazard exists under favoring conditions of small practice size. Dispersion in air and strong ignition source may result in an explosion.

SECTION 5 - REACTIVITY DATA

STABILITY: Stable

INCOMPATABILITY (MATERIALS TO AVOID): 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 Brass

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 provide irritation of eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes of copper,zinc and lead may cause metal fume fever characterized by a metallic taste in the mouth, dryness and irritation of the throad and influenza-like 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 damange, 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 combustable and flammable materials.