

## **Grade Stakes**

## MATERIAL SAFETY DATA SHEET

## Section I - PRODUCT IDENTIFICATION

Manufacturer: BoMetals, Inc.

141 Hammond Street

Carrollton, GA 30117

Product Class: Mild Steel

Trade Name: **Grade Stakes** Product Code: GS-12,GS-18, GS-30

C.A.S. Number: **MIXTURE** MSDS Date: June 2005 Information Phone: 770-832-2000 Emergency Phone: 770-832-2000

Hazard Ratings:

None -> extreme

Fire - 0

Health - 0

Reactivity - 0

## **SECTION II - HAZARDOUS INGREDIENTS**

## **Galvanized Steel**

|                    |           | Weight   | Weight Exposure Limi |              | VP     |
|--------------------|-----------|----------|----------------------|--------------|--------|
| <u>Ingredients</u> | CAS#      | %_       | ACGIH/TLV            | OSHA/PEL     | Mm/ HG |
| Carbon (C)         | 7440-44-0 | 0.01-1.2 | NE                   | NE           | NA     |
| Chromium (Cr)      | 7440-47-3 | 0.01-1.5 | 0.5                  | 1            | NA     |
| Iron (Fe)          | 7439-96-5 | >90      | 10 Iron Oxide        | 5 Iron Oxide | NA     |
|                    |           |          | Fume                 | Fume         |        |
| Manganese (Mn)     | 7439-96-5 | 0.1-1.9  | 5                    | 5 Dust       | NA     |
| Nickel (Ni)        | 7440-02-0 | 0.01-1.5 | 1                    | 1            | NA     |
| Silicon (Si)       | 7440-02-0 | 0.1-1.5  | 10 Dust              | 10 Dust      | NA     |

<sup>\*</sup>Toxic chemical as defined by OSHA, 29CFR 1910.1200 and subject to SARA Title III, Section 313 reporting requirements.

## SECTION III - PHYSICAL DATA

Boiling Range: **Evaporation Rate:** Volatiles, vol. %<0.005

Appearance: V.O.C.:

N/A Non Volatile Wgt % < 0.005

Coated Sheet Steel Channels

<0.01%

Vapor Density: Liquid Density: Spec. Gravity:

Non Volatile Heavier than Water

NA

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA Flammability Class: 0 Flash Point: >600°F LEL: NONE UEL: 0.00% -EXTINGUISHING MEDIA: Carbon dioxide - Dry Chemical - Foam - Water -SPECIAL FIREFIGHTING PROCEEDURES: Wear self-contained breathing apparatus (SCBA) in positive pressure mode. Personnel not having suitable respiratory protection must leave the area to prevent significant exposure to combustion gases from any source. In enclosed or poorly ventilated areas, wear SCBA during cleanup immediately after a fire as well as during the attack phase of fire fighting operations. -UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Section V - HEALTH HAZARD DATA -PERMISSIBLE EXPOSURE LEVEL: N/A -EFFECTS OF OVEREXPOSURE: Skin: Use protective gloves and/or other personal protective equipment as specified by a safety professional when cutting, welding, burning, or handling. Eyes: Use safety glasses and/or other protective eyewear as specified by a safety professional when exposure to eye or face hazard exists, such as flying objects, molten metal, and injurious light radiation (e.g., welding and burning). Acute overexposure to zinc oxide fumes can result in metal fume fever, a temporary flu-like Breathing: illness with symptoms such as dizziness, chills, fever, headache, and nausea. Ingestion: Not considered to be an ingestion hazard. -FIRST AID: Not anticipated to pose a significant skin hazard. However should dermatitis develop, wash Skin: affected area with mild soap and warm water. Seek medical attention is condition persists. Eye: Treat foreign body in the eye. Seek medical attention. Move affected person to fresh air. If breathing is difficult, administer oxygen. Get medical Breathing: attention if difficulty persists. Ingestion: Not considered to be an ingestion hazard.

Section VI - REACTIVITY DATA

| STABILITY:                                 | ( ) Unstable  | (x) Stable         |  |  |
|--|---------------|--------------------|--|--|
| HAZARDOUS POLYMERIZATION:                  | ( ) May occur | (x) Will not occur |  |  |
| -INCOMPATIBILITY:                          | -             |                    |  |  |
| Stable                                     |               |                    |  |  |
| -CONDITIONS TO AVOID:                      |               |                    |  |  |
| Fumes and or dust from further processing. |               |                    |  |  |
| -HAZARDOUS DECOMPOSITION PRODU             | CTS;:         |                    |  |  |

None.

## Section VII - SPILL OR LEAK PROCEDURES

# -STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Sweep up and return to container.

#### -WASTE DISPOSAL METHOD:

Landfill disposal is usually acceptable; check current local, state and federal regulations.

## Section VIII - SPECIAL PROTECTION INFORMATION

#### -RESPIRATORY PROTECTION:

With adequate ventilation consistent with good industrial workplace practices, there should be no need to use a respirator during normal processing; however, if air monitoring results show concentrations exceeding those limits listed for chemicals in Section II, wear a NIOSH/MSHA-approved respirator specific for those chemicals. Comply with OSHA 1910.134 (29 CFR)

#### -VENTILATION:

Provide sufficient mechanical (general and/or local exhaust) ventilation to afford good air-exchange in the work place consistent with good industrial hygiene practices.

#### -PROTECTIVE GLOVES:

Heat insulating.

## -EYE PROTECTION:

The wearing of safety glasses is consistent with good industrial safety practices.

## -OTHER PROTECTIVE EQUIPMENT;:

NONE

## Section IX - SPECIAL PRECAUTIONS

## -PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Wash with soap and water after handling.

### -OTHER PRECAUTIONS:

Avoid breathing decomposition products.

#### USER'S RESPONSIBILITY

This MSDS cannot cover all possible situations the use may experience during processing. Each aspect of the user's operation should be examined to determine if additional precautions may be necessary. All health and safety information contained herein should be provided to the user's employees. The user must be relied upon to utilize this information to develop appropriate work practice guidelines and employee instructional programs for his operation. Test all end uses thoroughly to assure appropriate material selection.

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