MetalMart International, Inc

MATERIAL SAFETY DATA SHEET

MAGNESIUM

Company	Issue Date	Description
METALMART INTERNATIONAL, INC. MARK METALS DIVISION 5828 SMITHWAY ST. COMMERCE, CA. 90040	November 12, 2009	MAGNESIUM or MAGNESIUM ALLOYS with more than 50% magnesium in pellets, turnings or ribbons

Trade Name (Common Name or Symbol)	UN Number	ICSC Number	NFPA Rating
MAGNESIUM	1869	0701	Health=0, Flamability=1, Reactivity=1, Other=Water Reactive

I. INGREDIENTS

NOTE: PRODUCTS UNDER NORMAL CONDITIONS DO NOT REPRESENT AN INHALATION, INGESTION OR CONTACT HEALTH HAZARD.

BASE METAL & ALLOYING ELEMENTS	CAS #	%COMPOSITION BY WEIGHT (1)	OSHA PEL	ACGIH TLV (mg/m") (2)
BASE METAL				
MAGNESIUM (Mg)	7439-95-4	BALANCE	15	10
ALLOYING ELEMENTS				
ALUMINUM (Al)	7429-90-5	<9	N.E.	10
MANGANESE (Mn)	7439-96-5	<1	5	5 (As dust-ceiling) 5 (As fume)
ZINC (Zn)	7440-66-6	<6	N.E.	10
ZIRCONIUM (Zr)	7440-67-7	<1	5	

(1) % OF ALLOYING MATERIAL VARIES WITH GRADE OF MATERIAL (2) 1985 - 1986 ACGIH THRESHOLD LIMIT VALUE

II. PHYSICAL DATA

Material is (At Normal Conditions)		Appearance and Odor	
[ ]Liquid [X] Solid [ ] Gas [ ] Other		SILVER – ODORLESS	
Acidity/Alkalinity PH – N/A	Melting Point 1202°F Boiling Point 2012°F	Specific Gravity (H_2O =1) 1.74 Solubility in Water (% by weight) N/A	Vapor Pressure (mm Hg at 20°C) N/A

III. PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection	Hands, Arms and Body
NIOSH/MSHA APPROVED DUST & FUME RESPIRATOR SHOULD BE USED TO AVOID EXCESSIVE INHALATION OF PARTICULATES WHEN EXPOSURE EXCEEDS TLV'S	PROTECTIVE GLOVES ARE RECOMMENDED DURING HANDLING OF FINES EXPOSURE
Eyes and Face	**Other Clothing and Equipment**
SAFETY GLASSES OR GOGGLES SHOULD BE UTILIZED AS REQUIRED BY EXPOSURE	OTHER PROTECTIVE EQUIPMENT SHOULD BE UTILIZED AS REQUIRED BY THE WELDING STANDARD

IV. EMERGENCY MEDICAL 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.

V. HEALTH/SAFETY INFORMATION

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	Suspected Cancer Agent?
[X] INHALATION [ ] SKIN CONTACT [ ] SKIN ABSORPTION [ ] INGESTION	[X] NO. This products Ingredients are not Found in Federal OSHA NTP IARC [ ] YES. This products Ingredients are not Found in Federal OSHA NTP IARC

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

Subjecting zinc or alloys containing zinc to high temperatures (such as occurs during welding) will cause the formation of zinc oxide. Exposure to zinc oxide fumes or dusts can result in a flu-like illness called metal fume fever. Early symptoms may include a sweet or metallic taste in the mouth, dryness and irritation of the throat, and coughing. These symptoms may progress to shortness of breath, headache, fever, chills, muscle aches, nausea, vomiting, weakness, fatigue and profuse sweating. The attack may last 6-48 hours and is more likely to occur after a period away from the job.

Flash Point	Auto Ignition Temp.	Flammability Limits In Air	Extinguishing Media
N/A °F	N/A °F	Lower N/A°F, Upper N/A°F	DRY SAND, METAL EXTINGUISHING POWDERS SUCH AS GI, MET-L-X

Fire and Explosion Hazards
REACTS WITH ACID TO FORM HYDROGEN GAS. IN FINELY DIVIDED FORM, WILL REACT WITH WATER & ACIDS TO RELEASE HYDROGEN (REACTIVITY CHANGES TO #2) AND MAY CAUSE FIRES OR EXPLOSION. KEEP AWAY FROM SOURCES OF IGNITION.

Stability	Incompatibility (Materials to Avoid)	Extinguishing Media not to be used
[X] Stable [ ] Unstable	ACID, WATER,	DO NOT USE WATER, FOAM OR HALOGEN ON DUST FIRES

Reactivity	Conditions to Avoid	Hazardous Decomposition Products
SEE FIRE AND EXPLOSION SECTION. SEE ADDITIONAL INFORMATION.	SEE FIRE AND EXPLOSION SECTION. SEE ADDITIONAL INFORMATION.	SEE FIRE AND EXPLOSION SECTION. SEE ADDITIONAL INFORMATION.

VI. ENVIRONMENTAL

Spill or Leak Procedure	Waste Disposal Method
Remove all sources of ignition. Ventilate area of the spill. Sweep spilled substance into clean, dry metal container. Do not use water in collection process. If spilled magnesium has come into contact with water, proceed with caution. Hydrogen gas may be generated, which may cause a fire or explosion.	According to local, State and Federal Regulations

VII. ADDITIONAL INFORMATION

Ventilation:
Local exhaust ventilation should be utilized when welding, burning, sawing, brazing, grinding or machining when exposure exceeds TLV's. In welding, precautions should be taken for airborne contaminates which may originate from components of welding rod. Arc or spark generated when welding or burning could be a source of ignition for combustible and flammable materials. When heated in air to a temperature near its melting point, magnesium alloys ignite and burn with a white flame. Use of water on molten magnesium will produce Hydrogen gas and may cause an explosion.

Special Precautions to be Taken in Processing, Handling and Storage:
Store product in dry location. Wet, moist or high humidity storage conditions will lead to corrosion of the product. Store away from other combustibles. See National Fire Protection Association Bulletin NFPA 480, "Storage, Handling and Processing of Magnesium" for detailed information.