

## Supplier:

Magnaloy Coupling Company  
601 Palm Street / P.O. Box 455  
Alpena MI 49707  
(517) 356-2186

## For Additional Information contact:

Corporate Manager of Industrial Hygiene  
AMAX Inc.  
AMAX Center  
Greenwich CT 06836  
(203) 629-7112

## SECTION I - PRODUCT IDENTIFICATION

CHEMICAL NAME: Magnesium Alloys  
TRADE NAME: None  
FORMULA: Mg + Al + Zn  
CAS NO: 7439-95-4  
PHYSICAL FORM: Solid

## SECTION II - COMPOSITION

MATERIAL	CAS NO.	%	PERMISSIBLE AIR LEVEL
Magnesium	7439-95-4	85.0 - 96.0	OSHA: None; ACGIH: None
Zinc	7440-66-6	0.0 - 12.0	OSHA: None; ACGIH: None
Aluminum	7429-90-5	0.0 - 9.5	OSHA: None; ACGIH: None

## SECTION III - PHYSICAL DATA

SPECIFIC GRAVITY: 1.74  
VAPOR PRESSURE: Essentially Zero  
APPEARANCE AND ODOR: Silver Solid, No Odor  
SOLUBILITY IN WATER: Insoluble

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None      FLAMMABLE LIMITS:    LEL: N/A      UEL: N/A

EXTINGUISHING MEDIA: Dry extinguishing powders or dry sand. DO NOT USE: Water, Foam, Carbon Tetrachloride, or Carbon Dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Wear protective fire fighting clothing and self-contained breathing equipment. Protect eyes and skin against flying particles.

UNUSUAL FIRE AND EXPLOSION HAZARDS: During the machining of magnesium, care must be taken to prevent heat build-up in machining fines which could result in fire. Follow generally accepted industry machining guide lines for Magnesium to reduce the risk of fire.

## SECTION V - REACTIVITY

STABILITY: Magnesium is stable unless heated.

INCOMPATIBILITY: Violent chemical reaction with metals, air (Al+KClO<sub>4</sub>), NH<sup>4</sup>NO<sub>3</sub>, BeO, [Ba(NO<sub>3</sub>)<sub>2</sub>+BaO<sub>2</sub>+Zn] carbonates, CCl<sub>4</sub>, Cl<sub>2</sub>, ClF<sub>3</sub>, CHCl<sub>3</sub>, Co(CN)<sub>2</sub>, CuO, [CuSO<sub>4</sub>(anhydrous) + NH<sub>4</sub>NO<sub>3</sub>+KClO<sub>3</sub>+H<sub>2</sub>O], CuSO<sub>4</sub>, F<sub>2</sub>, AuCN, (H<sub>2</sub>+CaCO<sub>3</sub>), Ni(CN)<sub>2</sub>, HNO<sub>3</sub>, NO<sub>2</sub>, O<sub>2</sub> liquid, performic acid, phosphates, KClO<sub>3</sub>, KClO<sub>4</sub>, AgNO<sub>3</sub>, Ag<sub>2</sub>O, NaClO<sub>4</sub> (Na<sub>2</sub>O<sub>2</sub>+CO<sub>2</sub>), SnO<sub>2</sub> sulfates, trichloroethylene, Zn(CN)<sub>2</sub>, ZnO, Na<sub>2</sub>O<sub>2</sub>.

HAZARDOUS DECOMPOSITION PRODUCTS: Heating of magnesium will produce magnesium oxide fumes.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - SPILL OR LEAK PROCEDURES

PRECAUTIONS FOR HANDLING AND STORAGE: None

STEPS TO BE TAKEN IN MATERIAL IS RELEASED OR SPILLED: Reclaim for reuse

WASTE DISPOSAL METHOD: Dispose of in accordance with Federal, State and local laws.

OTHER: This material was reported on the initial TSCA inventory.

SECTION VII - SPECIAL PROTECTION INFORMATION

VENTILATION: Local ventilation to exhaust dust or fumes that may be produced by the heat generated during processing of this material.

PERSONAL PROTECTION EQUIPMENT: Use a NIOSH/MSHA approved respirator if exposed to fumes or dust resulting from the processing of this material. Wear eye protection when handling this material to prevent chips or fines from entering eyes.

SECTION VIII - HEALTH HAZARD DATA

OSHA PERMISSIBLE EXPOSURE LEVEL:	Zinc Oxide Fumes:	5 mg/m <sup>3</sup>
	Magnesium Oxide Fumes:	15 mg/m <sup>3</sup>

ACGIH THRESHOLD LIMIT:	Zinc Oxide Fumes:	5mg/m <sup>3</sup>	
	Zinc Oxide Dust (nuisance dust):	Total Dust:	10 mg/m <sup>3</sup>
		Respirable Dust:	5 mg/m <sup>3</sup>
	Magnesium Oxide Fumes (nuisance dust):	Total Dust:	10 mg/m <sup>3</sup>
		Respirable Dust:	5 mg/m <sup>3</sup>

PRIMARY ROUTE OF ENTRY: Inhalation of dust or fumes, skin contact.

SYMPTOMS AND EFFECTS OF ACUTE OVER-EXPOSURE: Inhalation of dust or fumes created by the processing of this material may be irritating to the eyes and respiratory tract and may cause metal fume fever with chills, tightness in chest, cough, nausea and vomiting.

Particles embedded in the skin can produce gaseous blebs.

SYMPTOMS AND EFFECTS OF CHRONIC OVER-EXPOSURE: These are no known effects of chronic exposure to magnesium.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY THIS MATERIAL: Chronic respiratory disease may be aggravated by exposure to dust or fumes.

IS THIS MATERIAL CONSIDERED TO BE CARCINOGENIC BY:

NTP? No

IARC? No

OSHA? No

SECTION IX - MEDICAL

If a person breathes in a large amount of dust, remove from exposure; if breathing has stopped, perform artificial respiration. Call a physician. If irritation of the skin occurs, consult a physician.