



**JHIH GUAN® JHIHGUAN METAL & MATERIAL CO., LTD.  
JHIHGUAN INTERNATIONAL TRADING CO. LTD.**

**志冠金屬材料有限公司**

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**Material Safety Data Sheet**

**Material Name: MG90, MG90S, MG95S, Magnesium Ingot**

**SDS ID: 00202650\_BR**

**\*\*\*Section 1 - IDENTIFICATION\*\*\***

**Material Name:** MG90, MG90S, MG95S, Magnesium Ingot

**Product Use**

alloy

**Restrictions on Use**

None known.

**Manufacturer Information**

YiWu Sunrise Metal Materials Co.,Ltd.

**\*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\***

**GHS Classification**

No classification is assigned, based on classification criteria. Review the entire data sheet for any additional information which did not result in a GHS classification.

**GHS LABEL ELEMENTS**

**Symbol(s)**

None needed according to classification criteria.

**Signal Word**

None needed according to classification criteria.

**Hazard Statement(s)**

None needed according to classification criteria.

**Precautionary Statement(s)**

**Prevention**

None needed according to classification criteria.

**Response**

None needed according to classification criteria.

**Storage**

None needed according to classification criteria.

**Disposal**

Dispose in accordance with all applicable regulations.

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## Other Hazards which do not Result in Classification

Dust, particles or powder generated during processing would have the following classification: In contact with water releases flammable gases which may ignite spontaneously. Catches fire spontaneously if exposed to air. Toxic if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause long lasting harmful effects to aquatic life.

## \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent
7439-95-4	MAGNESIUM	99.9-99.95
7439-89-6	IRON	0.004 - 0.040
7439-96-5	MANGANESE	0.005-0.030
7429-90-5	ALUMINUM	0.005-0.020
7440-21-3	SILICON	0.005 - 0.009
7440-23-5	SODIUM METAL	0.002 - 0.010
7440-66-6	ZINC	<0.005
Not Available	ADDITIONAL COMPONENTS	<0.005
7440-31-5	TIN	<0.003
7440-50-8	COPPER	0.001-0.004
7440-70-2	CALCIUM	0.001 - 0.0015
7439-92-1	LEAD	<0.001
7440-02-0	NICKEL	<0.001
7440-43-9	CADMIUM	<0.001

## Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Aluminum, welding fumes, Zinc powder - zinc dust (stabilised).

## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Description of Necessary Measures

#### Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

#### Skin

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

#### Eyes

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

#### Ingestion

If swallowed, get medical attention.

### Most Important Symptoms/Effects

#### Acute

powder: respiratory tract irritation, skin irritation, eye irritation

#### Delayed

no information on significant adverse effects

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## Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

### \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

#### Suitable Extinguishing Media

regular dry chemical, dry sand, soda ash

#### Unsuitable Extinguishing Media

Do not use high-pressure water streams.

#### Specific Hazards Arising from the Chemical

Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. May release extremely flammable gases on contact with water.

#### Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products.

#### Hazardous Combustion Products

**Combustion:** miscellaneous decomposition products

### \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Use non-sparking tools and equipment.

#### Environmental Precautions

Avoid release to the environment.

#### Methods and Materials for Containment and Cleaning up

Do not touch or walk through spilled material. Avoid heat, flames, sparks and other sources of ignition. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry. Collect material into suitable, loosely covered container for disposal. Move containers away from spill to a safe area. Do not get water directly on material.

### \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

#### Precautions for Safe Handling

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dissipate static electricity during transfer by earthing (grounding and bonding) containers and equipment. Avoid friction and static electricity. Avoid breathing dust. Wash thoroughly after handling.

#### Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

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**Incompatibilities:** combustible materials, acids, metals, oxidizing materials, metal salts, halo carbons, cyanides, halogens, peroxides, metal oxides

## \* \* \*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\* \* \*

### Component Exposure Limits

#### MANGANESE (7439-96-5)

5 mg/m<sup>3</sup> TWA LT (dust); 1 mg/m<sup>3</sup> TWA LT (fume)

#### LEAD (7439-92-1)

0.1 mg/m<sup>3</sup> TWA LT

### Appropriate Engineering Controls

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

#### Eyes/Face

Wear safety glasses or safety goggles, with a faceshield, as appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Protective Clothing

Wear appropriate chemical resistant clothing.

#### Glove Recommendations

Wear appropriate chemical resistant gloves.

#### Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum.

Consider warning properties before use.

Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100.

Any air-purifying full-facepiece respirator equipped with an N95, R95, or P95 filter. The following filters may also be used: N99, R99, P99, N100, R100 or P100.

Any powered, air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter.

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.

#### For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

## \* \* \*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\* \* \*

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<b>Physical State:</b>	Solid	<b>Appearance:</b>	Not available
<b>Physical Form:</b>	solid	<b>Odor:</b>	Not Available
<b>Odor Threshold:</b>	Not available	<b>Melting Point:</b>	648.9 °C
<b>Boiling Point:</b>	1107 °C	<b>Vapor Pressure:</b>	Not applicable
<b>Vapor Density (air = 1):</b>	Not applicable	<b>Density:</b>	Not available
<b>Specific Gravity (water = 1):</b>	Not available	<b>Water Solubility:</b>	Not available
<b>Coeff. Water/Oil Dist:</b>	Not available		

## Other Property Information

No additional information is available.

## \* \* \*Section 10 - STABILITY AND REACTIVITY\* \* \*

### Reactivity

powder: May release extremely flammable gases on contact with water.

### Chemical Stability

Stable at normal temperatures and pressure. Finely divided material may ignite spontaneously.

### Possibility of Hazardous Reactions

Will not polymerize.

### Conditions to Avoid

Avoid generating dust or fumes. Avoid heat, flames, sparks and other sources of ignition. Keep dry.

### Incompatible Materials

combustible materials, acids, metals, oxidizing materials, metal salts, halo carbons, cyanides, halogens, peroxides, metal oxides

### Decomposition Products

miscellaneous decomposition products

### Hazardous Decomposition

**Combustion:** miscellaneous decomposition products

## \* \* \*Section 11 - TOXICOLOGICAL INFORMATION\* \* \*

### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**MAGNESIUM (7439-95-4)**

Oral LD50 Rat 230 mg/kg

### Immediate Effects

powder: respiratory tract irritation, skin irritation, eye irritation

### Delayed Effects

No information on significant adverse effects.

### Irritation/Corrosivity Data

Exposure to powder or dusts may be irritating to eyes, nose and throat.

### Respiratory Sensitization

No information available for the product.

### Dermal Sensitization

No information available for the product.

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## Carcinogenicity

### Component Carcinogenicity

MANGANESE (7439-96-5)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

## Mutagenic Data

No information available for the product.

## Reproductive Effects Data

No information available for the product.

## Tumorigenic Data

No information available for the product.

## Specific Target Organ Toxicity - Single Exposure

No target organs identified.

## Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

## Aspiration Hazard

Not expected to be an aspiration hazard.

## Medical Conditions Aggravated by Exposure

No data available.

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## \* \* \*Section 12 - ECOLOGICAL INFORMATION\* \* \*

### Ecotoxicity

#### Component Analysis - Aquatic Toxicity

##### IRON (7439-89-6)

**Fish:** 96 Hr LC50 Morone saxatilis: 13.6 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.56 mg/L [semi-static]

##### ZINC (7440-66-6)

**Fish:** 96 Hr LC50 Pimephales promelas: 2.16 - 3.05 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 0.211 - 0.269 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 2.66 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 30 mg/L; 96 Hr LC50 Cyprinus carpio: 0.45 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 7.8 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 3.5 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.24 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.59 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 0.41 mg/L [static]

**Algae:** 96 Hr EC50 Pseudokirchneriella subcapitata: 0.11 - 0.271 mg/L [static]; 72 Hr EC50 Pseudokirchneriella subcapitata: 0.09 - 0.125 mg/L [static]

**Invertebrate:** 48 Hr EC50 Daphnia magna: 0.139 - 0.908 mg/L [Static]

##### COPPER (7440-50-8)

**Fish:** 96 Hr LC50 Pimephales promelas: 0.0068 - 0.0156 mg/L; 96 Hr LC50 Pimephales promelas: <0.3 mg/L [static]; 96 Hr LC50 Pimephales promelas: 0.2 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.052 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1.25 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.3 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 0.8 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 0.112 mg/L [flow-through]

**Algae:** 72 Hr EC50 Pseudokirchneriella subcapitata: 0.0426 - 0.0535 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.031 - 0.054 mg/L [static]

**Invertebrate:** 48 Hr EC50 Daphnia magna: 0.03 mg/L [Static]

##### LEAD (7439-92-1)

**Fish:** 96 Hr LC50 Cyprinus carpio: 0.44 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 1.17 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1.32 mg/L [static]

**Invertebrate:** 48 Hr EC50 water flea: 600 µg/L

##### NICKEL (7440-02-0)

**Fish:** 96 Hr LC50 Brachydanio rerio: >100 mg/L; 96 Hr LC50 Cyprinus carpio: 1.3 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 10.4 mg/L [static]

**Algae:** 72 Hr EC50 Pseudokirchneriella subcapitata: 0.18 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.174 - 0.311 mg/L [static]

**Invertebrate:** 48 Hr EC50 Daphnia magna: >100 mg/L; 48 Hr EC50 Daphnia magna: 1 mg/L [Static]

##### CADMIUM (7440-43-9)

**Fish:** 96 Hr LC50 Oncorhynchus mykiss: 0.003 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.006 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.002 mg/L; 96 Hr LC50 Cyprinus carpio: 4.26 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 0.24 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 21.1 mg/L [flow-through]; 96 Hr LC50 Oryzias latipes: 0.016 mg/L; 96 Hr LC50 Pimephales promelas: 0.0004 - 0.003 mg/L

**Invertebrate:** 48 Hr EC50 Daphnia magna: 0.0244 mg/L [Static]

### Persistence and Degradability

No information available for the product.

### Bioaccumulative Potential

No information available for the product.

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## Mobility in Environmental Media

No information available for the product.

## \*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Disposal of Contaminated Packaging

Empty containers may contain product residue.

## \*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*

### IATA Information

No Classification assigned.

### ICAO Information

No Classification assigned.

### IMDG Information

No Classification assigned.

### Marine Pollutant Information

**COPPER (7440-50-8)**

**IMDG:** IMDG regulated marine pollutant (Listed in the index)

## \*\*\*Section 15 - REGULATORY INFORMATION\*\*\*

### Brazil Regulations

#### Prohibited Ozone Depleting Substances

None of this product's components are on the list.

#### Restricted Commercial Use of Ozone Depleting Substances

None of this product's components are on the list.

### Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
MAGNESIUM	7439-95-4	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
IRON	7439-89-6	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
MANGANESE	7439-96-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
ALUMINUM	7429-90-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
SILICON	7440-21-3	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
SODIUM METAL	7440-23-5	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
ZINC	7440-66-6	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
TIN	7440-31-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
COPPER	7440-50-8	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
CALCIUM	7440-70-2	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
LEAD	7439-92-1	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
NICKEL	7440-02-0	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
CADMIUM	7440-43-9	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes

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## \* \* \*Section 16 - OTHER INFORMATION\* \* \*

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

### Other Information

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### Distributor Information:

End of Sheet 00202650\_BR