

SAFETY DATA SHEET –

MAGNESIUM ALLOYS POWDER
UN1418 4.3(4.2) PG II

Section 1: Identification

Common Name: PHOTO FLASH "B" BOTTLE

Trade Name & Synonyms: MAGNESIUM ALLOYS POWDER

Manufacturer's Name: MP ASSOCIATES INC.

Address: PO. Box 546
IONE, CA. 95640

Recommended Use: Pyrotechnic Effects Professional Use

Informational Telephone Number: 1-(209) 274-4715

Emergency Contact:

ChemTel US 24 Hr.: 1-(800) 255-3924

ChemTel Worldwide Intl.: +01-813-248-0585

Section 2: Hazard(s) Identification

Signal Word

Danger

Pictogram



Hazard Statement

When mixed with an oxidizer material becomes highly flammable and an explosive.
Catches fire spontaneously if exposed to air.
Contact with water releases flammable gases which may ignite spontaneously.

Precautionary Statement

Keep contents in original container.
Keep out of reach of children.
Do not eat, drink or smoke while using this product.
Use personal protective equipment as required
Dispose of contents/container by following all local, state and federal laws.
Store in original container, in a cool, dry place in accordance with requirements of all local, state and federal laws.
Keep container tightly closed.
Protect from moisture.

Section 3: Composition / information on ingredients

Component

CAS-Number

Weight %

Chemical Name: MAGNESIUM ALLOYS POWDER

N/A Mixture

N/A

WARNING: These products contain chemicals known to the State of California to cause cancer, reproductive harm or birth defects.

Used in binary explosives, pyrotechnics, special effects and photography

Section 4: First-aid measures

Ingestion:

If swallowed, do not induce vomiting, never give anything by mouth to an unconscious person. Get medical attention immediately.

Eye Contact:

Exposed powder metal dust may cause eye irritation. Check for and remove contact lenses, flush eyes with water for 15 minutes, if irritation persists seek medical attention.

Inhalation:

If dust is inhaled remove to fresh air, if not breathing give CPR. If breathing is difficult give oxygen. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing. Wash the affected area with copious amounts of water.

Injury from fire:

For thermal burns seek prompt medical attention.

Section 5: Fire-fighting measures

Special Procedures:

All powdered metals are highly flammable.
Mixed binary is highly flammable and deflagration can occur when mixed with Bottle "A".
Do Not Use Water to extinguish, use sand or approved Class D extinguisher – Large fire withdraw and let burn
Could catch fire if exposed to dry air where static charges could be present. Reacts with water to liberate flammable and/or explosive gas. Emits toxic fumes under fire conditions.

Emergency Response Guidebook: See guide 138

Unusual Hazards:

When mixed with oxidizer, pyrotechnic compositions burn violently and are self oxidized, faster burning compositions may reach detonation levels dependent upon composition, package configuration and/or amount of containment. Do Not touch or walk through spilled material.

Flash Point:

N/A.

Auto ignition Temp:

440 Degrees C

NFPA Ratings:

Health = 1

Flammability = 2

Reactivity = 2

Advice and PPE for Firefighters:

Fires involving flammable solids should not be fought unless proper extinguishing media can be applied from a well protected and distant location from the point of fire. Self-contained breathing apparatus and protective clothing must be worn. Follow Emergency response Guide 138. Wash all clothes prior to reuse.



Section 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Non-flammable or flame retardant clothing should be worn when cleaning up spilled material. Material is sensitive to ignition from sources such as heat, flame, impact, friction or sparks. Therefore, non-sparking utensils should be used.

Spill / leak response:

Small Spill: Cover with dry earth or sand, followed by plastic sheet to minimize spreading or contact with rain. DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

Large Spill: Flammable solid. Do Not touch spilled material. Do Not use water. Prevent entry into sewers, and/or drains. Eliminate all ignition sources. Call for assistance on disposal procedures.

Environmental Precautions:

Spill residues may be disposed of per guidelines under Section 13; Disposal Considerations.

Remove all ignition sources, do not eat, drink, smoke when working. Avoid contact with eyes. Keep unauthorized persons away. Avoid friction or impact.

Contaminated materials must be disposed of as waste according to Section 13.

Section 7: Handling and storage**Storage Conditions:**

When contents are mixed with the "A" Bottle (Oxidizer), mixture becomes highly reactive. Care must be taken when mixing with oxidizer.

Avoid, impact, friction and static. Protect against heat effects. Keep away from combustibles. Avoid electrostatic changes.

Absolutely no smoking around flammable solids. Keep away from combustibles. Avoid electrostatic changes.

Store in a cool, dry place. Do not store in the same area with incompatibles as oxidizing agents, acids and moisture.

Ground all equipment containing material.

Keep out of reach of children. Handle article container with care.

Follow all local, state and federal laws when storing this product.

Section 8: Exposure controls / personal protection**Personal protection for routine use:**

Avoid unnecessary exposure to metal dust.

Safety glasses, flame resistant clothing, Dust respirator.

Avoid contact of powder, gloves may be worn to protect shin. ANSI approved safety goggles are recommended for eye protection.

Other protective equipment is determined by manner in which product is being used, handled or during disposal.

Exposure to open flame may cause severe burns.

Section 9: Physical and chemical properties

| | |
|-------------------------------------|-------------------|
| <u>Appearance:</u> | Light silver/gray |
| <u>PH:</u> | Not Applicable |
| <u>Odor:</u> | Odorless. |
| <u>Boiling Point:</u> | Data unavailable |
| <u>Melting Point:</u> | Data unavailable |
| <u>Critical Temperature:</u> | Not available |
| <u>Explosive Properties:</u> | N/A |
| <u>Vapor Pressure:</u> | N/A |
| <u>Vapor Density:</u> | N/A |

| | |
|---------------------------------------------|----------------------------------------------------------|
| <u>Autoignition Temperature</u> | N/A |
| <u>Percent Volatile by Volume %:</u> | N/A |
| <u>Dispersion Properties:</u> | N/A |
| <u>Specific Gravity:</u> | N/A |
| <u>Solubility in water:</u> | Highly reactive in water produces toxic fumes |

Section 10: Stability and reactivity**General Information:**

Flammable solid, self-reactive when exposed to air. Exposure to water can spontaneously ignite, and cause flammable toxic gases.

Corrosively:

Non-corrosive in presence of glass.

Conditions to Avoid:

Violent chemical reaction with oxidizing agents, reacts with water to create hydrogen gas and heat. Must be kept dry. Reacts with acids to form hydrogen gas which is highly flammable and explosive. Magnesium forms hazardous or explosive mixtures with aluminum and potassium perchlorate; ammonium nitrate; barium nitrate, barium dioxide and zinc; beryllium carbon tetrachloride; chlorine; cadmium cyanide, cadmium oxide; calcium carbide; carbonates; ammonium nitrate; potassium chlorate and water; potassium perchlorate; hydrogen peroxide; iodine; lead cyanide; mercuric oxide; methyl chloride; silver nitrate; silver oxide, sodium perchlorate; sodium peroxide; sulfates; trichloroethylene and zinc oxide.

SAFETY DATA SHEET –

MAGNESIUM ALLOYS POWDER
UN1418 4.3(4.2) PG II

Section 11: Toxicological information

Routes of Entry:

Inhalation, ingestion.

Other toxic Effects on Humans:

Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation, can cause irritation to mucas membrane and lungs. This product has no known chronic effects. Follow safe industrial hygiene practices.

Special Remarks:

Ingestion of powders may cause irritation with nausea, may cause skin irritation by mechanical action. May cause eye irritation by mechanical action. Low hazard for usual handling. It may cause respiratory tract irritation. There are no known reports of serious industrial poisonings with Magnesium.

Section 12: Ecological information

Possibly hazardous short term, degradation products are not likely. The products of degradation are less toxic than the product itself. Keep powder residues out of water ways and sewers.

Section 13: Disposal considerations

Dispose of in accordance with federal, state and local requirements.

Care must be taken to prevent environmental contamination from use of this material. The user has the responsibility to dispose of unused materials, residues and containers in compliance with all relevant laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous waste.

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Do not dispose of in a fire.

Section 14: Transport information

Label Required:



Highway:

Class or Division: 4.3(4.2) PG II

UN Number: UN1418

Shipping Name: Magnesium Alloys Powder

Air Transport: UN1418 Magnesium Alloys Powder
4.3(4.2) PG II

Maritime IMDG: UN1418 Magnesium Alloys Powder
4.3(4.2) PG II

Section 15: Regulatory information

All flammable solids are reported annually as per Community Right-to Know (Tier II). Flammable Solids have been approved and copies of the approvals are on file with the Director of the Safety and Compliance Department.

Section 16: Other information

Prepared By: Dennis King

SDS Creation Date: May 2015, Rev. 05/01/2020

Disclaimer:

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief as of the date of its publication. The information provided herein is designed only as a guide, and MP Associates, Inc. (MPA) makes no warranty with respect to the accuracy or suitability for any purpose of the information provided. Users of the information contained herein should make their own investigations to determine the suitability of the information for their particular purposes. The information relates only to the specific material designated, and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. In no event shall MP Associates, Inc. or any of its affiliates be liable to any user of this information for any claims, losses, or damages of any third party or for its lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if MP Associates, Inc. affiliates or consultants have been advised of the possibility of such damages.