Safety
Data
Sheet

U·E·I Systems
A UEI® GROUP COMPANY

9090 Nieman • Overland Park, KS 66214 • (913) 541-0503 • Toll Free: 800-221-9059 • sales@ueisystems.com • ueisystems.com

Section 1 Chemical Product and Company Identification

Product Identifier MiraMag® Negative Resist Coated

Product Number IF-MAG8180, IF-MAG8280, IF-MAG8190, IF-MAG8290, IF-MAG8181, IF-MAG8281, IF-MAG8191, IF-MAG8291, IF-MAG8182, IF-MAG8282, IF-MAG8183, IF-MAG8283, IF-MAG8184, IF-MAG8284, IF-MAG8189, IF-MAG8284, IF-MAG8185, IF-MAG8285, IF-MAG8186, IF-MAG8286, IF-MAG8187, IF-MAG8287

General Use To make magnesium photoengraving dies

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Emergency Contact Number CHEMTEL – Available 24 hours/day, 7 days/week
Domestic North America: +1 800 255 3924
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Section 2 Hazards Identification

GHS Classification

Hazard Class	Hazard Category	Route of Exposure
Flammable Solids	1	–
Substances and Mixtures, which, in contact with water emit flammable gases	2	–

GHS Labeling

Contains Aluminum (7429-90-5) Zinc (7440-66-6) Magnesium (7439-95-4)

Danger

Hazard Statement
Flammable solid
In contact with water, release flammable gases

Precautionary Statements
Keep away from sparks and open flames. No smoking.
Keep away from any possible contact with water because of violent reaction and possible flash fire.
Handle under inert gas. Protect from moisture.
Wear protective gloves/eye protection/face protection.
Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage Store in a dry place. Store in a closed container.
Maintain air gap between stacks/pallets.

Disposal Dispose of contents/container to an approved waste disposal plant.

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Section 3 Hazardous Ingredients / Identity Information

Hazardous Components	CAS No.	%
Aluminum	7429-90-5	3.0
Zinc	7440-66-6	1.0
Magnesium	7439-95-4	96.0
Acrylates		<1.0

Section 4 First Aid Measures

In all cases, consult a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out mouth with water.

Eye Contact Immediately flush eyes with large amounts of water for at least 15 minutes.

Skin Contact Immediately flush skin with large amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Wash hands before eating and smoking.

Section 5 Firefighting Measures

Extinguishing Media Use dry powder

Special Hazards from Substance Magnesium oxide

Firefighting Equipment/Instructions Firefighters should wear NIOSH-approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

Section 6 Accidental Release Measures

Personal Precautions Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for Cleaning Up Sweep up and shovel. Contain spillage and then collect with an electrically-protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see Section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

Precautions for Safe Handling Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition. No smoking. Take measures to prevent the buildup of electrostatic charge.

Conditions for Safe Storage Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Store under inert gas. Material is air and moisture sensitive. Storage class (TRGS 510): Pyrophoric and self-heating hazardous materials.

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Section 8 Component Exposure Limits

Control Parameters	Contains no substances with occupational exposure limit values.
Appropriate Engineering Controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Eye/Face Protection	Wear face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards, such as NIOSH (US) or EN 166 (EU).
Skin Protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (not touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection	Wear flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Personal Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of Environmental Exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9 Physical and Chemical Properties

Appearance/Odor	Solid/no data available	**Odor Threshold**	No data available
pH	No data available	**Boiling Point**	1,994° F (1,090° C)
Melting Point	1,198° F (648° C)	**Solubility (H_2O)**	No data available
Relative Density	1.73 g/cm^3 at 73° F (23° C)	**Octanol/H_2O Coefficient**	No data available
Evaporation Rate	No data available	**Molecular Weight**	No data
Decomposition Temperature	No data available	**Auto Ignition**	Self-heating; Category 1
Lower Flammability Limit	No data available	**Flash Point**	No data available
Upper Flammability Limit	No data available	**Vapor Density**	No data available
Vapor Pressure	1 mmHg (1 hPa) at 1,150° F (621° C)	**Flammability**	May form combustible dust concentrations in air
Viscosity	No data available	**Explosive Properties**	No data available
Oxidizing Properties	No data available		

Section 10 Chemical Stability and Reactivity

Reactivity	No data available
Stability	Stable under recommended handling conditions
Hazardous Reactions	Reacts violently with water
Conditions to Avoid	Heat, flames and sparks; exposure to moisture.
Incompatible Materials	Acids, strong oxidizing agents, acid chlorides, halogens
Hazardous Decomposition/ By-Products	Other decomposition products no data available. In the event of fire, see Section 5

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Section 11 Toxicological Information

Skin Corrosion/Irritation	No data available
Serious Eye Damage/Irritation	No data available
Respiratory or Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **ACGIH**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. **NTP**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP. **OSHA**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive Toxicity	No data available
Specific Target Organ Toxicity Single Exposure	No data available
Specific Target Organ Toxicity Repeated Exposure	No data available
Aspiration Hazard	No data available
Additional Information	RTECS: Not available Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, chills, fever, fatigue, muscle pain, joint pain, rash, anorexia. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Section 12 Ecological Information

Ecotoxicity	No data available
Persistence/Degradability	No data available
Bioaccumulative Potential	No data available
Mobility in Soil	No data available
Results of PBT and vPvB Assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other Adverse Effects	No data available

Section 13 Disposal Considerations

Disposal Instructions	Recycle if possible. Dispose in accordance with Federal, State, Provincial, and local regulations.

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Section 14 Transportation Information

	Proper Shipping Name	Class	UN Number	Packaging Group
LAND TRANSPORT US DOT and Canadian TDG Surface Transportation:	Not regulated	Not regulated	Not regulated	Not regulated
SEA TRANSPORT IMDG:	Not regulated	Not regulated	Not regulated	Not regulated
AIR TRANSPORT ICAO/IATA:	Not regulated	Not regulated	Not regulated	Not regulated

Section 15 Regulatory Information

SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components The following components are subject to reporting levels established by SARA Title III, Section 313:

	Right To Know Components	CAS-No	Revision Date
Massachusetts	Aluminum	7429-90-5	1994-04-01
	Zinc	7440-66-6	1993-04-24
	Magnesium (non-pyrophoric)	7440-66-6	1993-04-24
Pennsylvania	Aluminum	7429-90-5	1994-04-01
	Zinc	7440-66-6	1993-04-24
	Magnesium (non-pyrophoric)	7440-66-6	1993-04-24
New Jersey	Aluminum	7429-90-5	1994-04-01
	Zinc	7440-66-6	1993-04-24
	Magnesium (non-pyrophoric)	7440-66-6	1993-04-24

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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Section 16 Other Information

UEI Systems® provides the information contained herein in good faith. It is believed to be correct. However it is not all-inclusive and should be used only as a guide. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. UEI Systems shall not be held liable for any damage resulting from handling or from contact with this product. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources.

Abbreviations

PEL Permissible Exposure Limit
TLV Threshold Limit Value

End Notes

1. SARA - Signed into law in 1986, the Superfund Amendments and Reauthorization Act (SARA) is an extension of CERCLA, and is intended to encourage and support local and state emergency planning efforts. SARA provides citizens and local governments with information about potential chemical hazards, and calls for facilities that store hazardous materials to provide officials and citizens with data on the type and amount on hand at specific locations. This field states whether a material is listed or not listed in section 372.65 of SARA. EHS - This states if a material is listed or not listed in Appendix B to part 355, the SARA Extremely Hazardous Substances (EHS) section. RQ is the reportable quantity. TPQ is the Threshold Planning Quantity.

2. RCRA - The Resource Conservation and Recovery Act enacted in 1976 and subsequently amended, controls solid-waste disposal and encourages recycling. This states whether a material is listed or not listed under this regulation. If listed the Hazardous Waste Number and waste characterization assigned by RCRA is also provided. 3. CERCLA - Enacted in 1980 and amended thereafter, the Comprehensive Environmental Response, Compensation, and Liability Act provides for identification and cleanup of hazardous materials released on land, into the air, waterways, and groundwater. It covers areas affected by newly released materials and older leaking or abandoned dump sites. This states whether a material is listed or not listed in CERCLA Table 302.4. If listed the section(s) that it is listed under and the Reportable Quantity (RQ) are also provided. 4. TSCA - The Toxic Substances Control Act controls the exposure to and use of raw industrial chemicals not subject to other laws. This states whether the chemical is listed or not listed under this regulation.

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