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® Etching Additive-XF

Product Number IR-CHE8535

General Use Printing operations

Company Address UEI Systems®, a UEI Group Company
9090 Nieman Road
Overland Park, KS 66214 USA

Phone +1 800 221 9059 or +1 913 541 0503

Emergency Contact Number CHEMTREC – Available 24 hours/day, 7 days/week
Domestic North America: +1 800 424 9300
International: +1 703 527 3887

Section 2 Hazards Identification

GHS Classification

Hazard Class	Hazard Category	Route of Exposure
Carcinogenicity	1B	–

GHS Labeling

Danger

Hazard Statements May cause cancer

Precautionary Statements Obtain special instructions before use
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.

Response **If exposed or concerned:** Get medical advice/attention

Storage Store locked up

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 Hazardous Ingredients / Identity Information

Hazardous Components	CAS No.	%
Mineral Seal Oil	64742-38-7	1–5

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Section 4 First Aid Measures

Skin Exposure If this product contaminates the skin, begin decontamination with running water. Minimum flushing is for 15 minutes if redness or irritation develops. Remove exposed or contaminated clothing, taking care not to contaminate eyes. The contaminated individual must seek medical attention if any adverse effect occurs.

Eye Exposure If vapors, mists, or sprays generated by this product enter the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 15 minutes. Contaminated individual must seek immediate medical attention.

Inhalation If vapors, mists or sprays generated by this product are inhaled, remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

Ingestion Routine use of this product is not expected to cause any situation which could lead to ingestion. If this product is swallowed, **call physician or Poison Control center for most current information.** Never induce vomiting to someone who is unconscious.

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.

Section 5 Firefighting Measures

Flash Point Not applicable

Auto Ignition Temperature Not applicable

Flammable Limits (in air by volume, %) Lower: Not applicable Upper: Not applicable

Fire Extinguishing Materials Use fire extinguishing materials appropriate for surrounding fire.

Unusual Fire and Explosion Hazards This product must be substantially preheated for ignition to occur. When involved in a fire, this material decomposes to generate irritating vapors and toxic gases (including carbon monoxide, carbon dioxide, and oxides of sulfur and nitrogen).

Explosion Sensitivity to Mechanical Impact Not sensitive

Explosion Sensitivity to Static Discharge Not sensitive

Special Firefighting Procedures Incipient fire responders should wear eye protection. Structural firefighters must wear self-contained breathing apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas. All fire response equipment which may become contaminated with this material should be thoroughly decontaminated with water before being returned to service.

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Section 6 Accidental Release Measures

Personal Precautions Wear gloves and approved respiratory protection if possibility of dust, mist and fume exposure exists.

Environmental Precautions Ensure compliance with local, state and federal regulations in the use of any waste containment program. Do not let product enter drains.

Methods for Cleaning Up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

Work and Hygiene Practices As with all chemicals, avoid getting this product **on you** or **in you**. Wash thoroughly after using this product. Do not eat, drink, smoke or apply cosmetics while handling this product. Avoid breathing vapors, mists, or sprays of this product. Remove contaminated clothing immediately.

Storage and Handling Practices All employees who handle this material should be trained to handle it safely. Open containers slowly on a stable surface. Containers of this product must be properly labeled. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, or sources of intense heat. Store away from incompatible materials (see Section 10, Chemical Stability and Reactivity). Material should be stored in secondary containers. Keep container tightly closed when not in use. Storage areas should be made of fire resistant materials.
If appropriate, post warning signs in storage and use areas. Inspect all incoming containers before storage to ensure containers are properly labeled and not damaged.

Section 7 Handling and Storage, continued

Protective Practices During Maintenance of Contaminated Equipment Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely, if necessary. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

Section 8 Component Exposure Limits

Appropriate Engineering Controls

Chemical Name	% w/w	Exposure Limits in Air Based on 8-Hour Time-Weighted Averages Unless Otherwise Stated					
		ACGIH		OSHA			
		TLV PPM	STEL	PEL PPM	STEL	IDLH	Other
Mineral Seal Oil CAS 64742-38-7	1–5	100	–	100	–	–	–

Appropriate Engineering Controls Use with adequate ventilation to ensure exposure levels are maintained below the limits provided in Section 3 (Hazardous Ingredients/Identity Information). Use a chemical fume hood or local exhaust ventilation, and process enclosure if necessary, to control airborne mists. Ensure eyewash/safety shower stations are available near areas where this product is used.

Personal Respiratory Protection Use NIOSH/MSHA approved dust respirator to avoid excessive inhalation of dust, fume or mist.

Protective Hand Protection Use protective gloves

Eye Protection Use safety glasses

Body Protection Wear body protection appropriate for task (e.g., apron, lab coat, coveralls)

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Section 9 Physical and Chemical Properties

Appearance and Odor	Clear, amber liquid	**Odor Threshold**	No data
pH	9.8	**Boiling Point**	Approximately 212° F (100° C)
Melting Point	No data	**Solubility (H_2O)**	Miscible
Specific Gravity	1.066	**Density**	No data
Octanol/H_2O Coefficient	No data	**Evaporation Rate**	No data
Molecular Weight	No data	**Decomposition Temperature**	No data
Auto Ignition	No data	**Lower Flammability Limit**	No data
Flash Point	No data	**Upper Flammability Limit**	No data
Vapor Density	No data	**Vapor Pressure**	Similar to water
VOC	No data	**Flammability Class**	No data
Viscosity	No data		

How to Detect this Substance The appearance and odor may be warning properties of this product.

Section 10 Chemical Stability and Reactivity

Stability Stable

Conditions to Avoid Fire, extremely high temperatures, and contact with incompatible chemicals

Incompatibility Strong oxidizers, strong acids and strong caustics

Hazardous Decomposition/ By-Products Thermal decomposition will produce carbon monoxide, carbon dioxide, and oxides of sulfur and nitrogen.

Hazardous Polymerization Will not occur

Section 11 Toxicological Information

Toxicity Data The specific toxicology data available for components greater than 1% in concentration are as follows:

Reproductive Toxicity Information Listed below is information concerning the effects of this product and its components on the human reproductive system.

Teratogenicity This product is not reported to produce embryotoxic effects in humans.

Reproductive Toxicity This product is not reported to produce embryotoxic effects in humans.

Section 12 Ecological Information

Ecotoxicity Releases of large quantities of this detergent solution into the environment may be harmful to aquatic life in the immediate area. This mixture may be harmful to animals, producing effects similar to those described for human exposures (see Section 2, Hazards Identification). No information is currently available on this solution's potential impact on plant life.

Persistence/Degradability No data available

Bioaccumulative Potential No data available

Mobility in Soil No data available

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Section 13 Disposal Considerations

Disposal Instructions Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

Section 14 Transportation Information

This material is not regulated under DOT provisions.

Section 15 Regulatory Information

	SARA[1]	SARA[1] EHS	RCRA[2]	CERCLA[3]	CERCLA[3] RQ	TSCA[4]
Mineral Seal Oil	Not listed	Not listed	Not listed	Not listed	None	Listed

Component Analysis – State

Component	CA	MA	MN	NJ	PA	RI
All components	N	N	N	N	N	N

California Prop 65 **Warning**: This product contains chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm

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.

Revision 15 June 2015

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