SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:
ALBAUGH, LLC
Ankeny, IA 50021

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : **KRENITE S**
CHEMICAL NAME : Ammonium salt of Fosamine
PRODUCT USE : Herbicide
PRODUCT CODE : EPA Reg. No 42750-247

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Colorless liquid

HEALTH HAZARDS: Causes moderate to severe eye irritation.

PHYSICAL HAZARDS: May release toxic gasses when burned

ENVIRONMENTAL HAZARDS: May be toxic to non-target plants

SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER
Ammonium Salt of Fosamine	41.5 %	25954-13-6
Inert Ingredients	58.5 %	n/a

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED: Move person to fresh air, if person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: No known antidote, treat symptomatically

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

FLASHPOINT: N/A

EXTINGUISHING MEDIA: Use water spray, foam or dry chemical.

FIRE AND EXPLOSION HAZARD: May decompose in fire due releasing irritating or toxic gases.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical extinguishing systems recommended to prevent environmental damage due to water runoff.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full firefighting turn-out gear (Bunker gear).

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.

LARGE SPILL: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash, or lime. Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

HANDLING: Use only in a well-ventilated area. Wear appropriate safety equipment when handling.

STORAGE: Keep away from food, feed and drinking water. Do not store below 10°F. Store product in original container only. Store in a cool, dry place.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

COMPONENT	OSHA PEL	ACIGH TLV
Ammonium Salt of Fosamine	Not listed	Not listed

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:
EYE PROTECTION - Safety glasses or goggles when mixing, loading or cleaning equipment is recommended.
CLOTHING – Long-sleeved shirt and long pants. Shoes plus socks,
GLOVES – Waterproof gloves when mixing, loading or cleaning equipment is recommended.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless liquid
Odor:	Irritating odor
pH:	5.2 – 6.2
Melting Point:	Not applicable
Boiling Point:	No data
Flash Point:	Not applicable
Evaporation Rate:	No data
Flammability:	Not flammable
Flammability Limits:	Not applicable
Vapor Pressure:	0.53 mPa (25°C) (Fosamine ammonium)
Vapor Density:	Not applicable
Density:	1.15 – 1.19 g/ml (9.60 – 9.93 lb/gl)*
Solubility:	Emulsifies
Partition Coefficient:	log Pow = -2.9 (25°C) (Fosamine ammonium)
Auto-Ignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	6.0 mPa (20°C); 2.8 mPa (40°C)

*Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: None known.

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid temperatures above (115°F, 46°C) and below 25°F (-5°C).

INCOMPATIBLE MATERIALS: Strong oxidizers or bases, mild and galvanized steel.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Nitrogen oxides, phosphorous oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD_{50} (rat)	- > 5,000 mg/kg
Dermal LD_{50} (rat)	- > 2,000 mg/kg
Inhalation LC_{50} (rat)	- > 4.1 mg/L
Eye Irritation (rabbit)	- Slight
Skin Irritation (rabbit)	- Slight
Sensitization (guinea pig)	- Non-sensitizer

CARCINOGEN STATUS:

OSHA	- Not listed
NTP	- Not listed
IARC	- Not listed

TERATOGENICITY: No evidence of reproductive or developmental toxicity.

MUTAGENICITY: No evidence of mutagenic effects during in vivo or in vitro studies.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

FATE: Fosamine is slightly persistent with a soil half life of 1 - 2 weeks. It is moderately mobile depending on soil type.

FISH TOXICITY: (Fosamine ammonium)

96 hour LC_{50}, Rainbow trout –	330 mg/L
96 hour LC_{50}, Bluegill –	590 mg/L

AVIAN TOXICITY: (Fosamine ammonium)

Oral LD_{50}, Bobwhite quail –	> 5,000 mg/Kg
Oral LD_{50}, Mallard duck –	> 5,000 mg/Kg

BEE: (Fosamine ammonium) > 100 ug/Bee

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

WASTE: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Refillable container. Refill this container with KRENITE S containing ammonium salt of fosamine only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller.

Refer to the product label for additional and complete Container Handling instructions

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION: (Ground transport)	Not regulated by DOT
TRANSPORT HAZARD CLASS:	N/A
UN NUMBER:	N/A
DOT PACKING GROUP:	PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY:	Not listed
SARA TITLE III STATUS:	
311/312 Hazard Categories –	Immediate Health
313 Toxic Chemicals –	None known
CALIFORNIA PROP 65:	Not listed
TSCA:	This product is exempted from TSCA because it is solely for FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH	1
	FLAMMABILITY	1
	PHYSICAL HAZARD	0
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

REVISED DATE: December, 2014

REFERENCE: Revised for GHS compliance