

**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**

|                                   |   |
|-----------------------------------|---|
| <b>Appearance:</b>                | Colorless liquid                          |
| <b>Odor:</b>                      | Irritating odor                           |
| <b>pH:</b>                        | 5.2 – 6.2                                 |
| <b>Melting Point:</b>             | Not applicable                            |
| <b>Boiling Point:</b>             | No data                                   |
| <b>Flash Point:</b>               | Not applicable                            |
| <b>Evaporation Rate:</b>          | No data                                   |
| <b>Flammability:</b>              | Not flammable                             |
| <b>Flammability Limits:</b>       | Not applicable                            |
| <b>Vapor Pressure:</b>            | 0.53 mPa (25°C) (Fosamine ammonium)       |
| <b>Vapor Density:</b>             | Not applicable                            |
| <b>Density:</b>                   | 1.15 – 1.19 g/ml (9.60 – 9.93 lb/gl)*     |
| <b>Solubility:</b>                | Emulsifies                                |
| <b>Partition Coefficient:</b>     | log Pow = -2.9 (25°C) (Fosamine ammonium) |
| <b>Auto-Ignition Temperature:</b> | No data                                   |
| <b>Decomposition Temperature:</b> | No data                                   |
| <b>Viscosity:</b>                 | 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 <sub>50</sub> (rat)       | - > 5,000 mg/kg  |
| Dermal LD <sub>50</sub> (rat)     | - > 2,000 mg/kg  |
| Inhalation LC <sub>50</sub> (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 <sub>50</sub> , Rainbow trout – | 330 mg/L |
| 96 hour LC <sub>50</sub> , Bluegill –      | 590 mg/L |

**AVIAN TOXICITY:** (Fosamine ammonium)

|  |               |
|--|---------------|
| Oral LD <sub>50</sub> , Bobwhite quail – | > 5,000 mg/Kg |
| Oral LD <sub>50</sub> , 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:** Not regulated by DOT  
(Ground transport)

**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<br>HAZARD<br>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