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 : **CAMO**
CHEMICAL NAME : Imazethapyr ammonium salt and Fomesafen sodium salt
PRODUCT USE : Herbicide
PRODUCT CODE : EPA Reg. No 42750-239

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

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

Greenish brown clear liquid

HEALTH HAZARDS: Severe eye irritant. Harmful if swallowed or absorbed through skin. May cause allergic skin reaction.

PHYSICAL HAZARDS: May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS: May be phytotoxic to non-target terrestrial plant species.

SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER
Sodium Salt of fomesafen	22.05%	108731-70-0
Ammonium salt of imazethapyr	5.38%	101917-66-2
Inert Ingredients	72.57%	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: Probable mucosal damage may contraindicate the use of gastric lavage.

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

FLASHPOINT: N/A

EXTINGUISHING MEDIA: Water spray, Foam

FIRE AND EXPLOSION HAZARD: Hydrogen chloride, Oxides of nitrogen and carbon.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid possible hazardous fumes and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive 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 and protective clothing.

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. 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. Do not reuse this container. Wear proper safety equipment.

STORAGE: Keep container closed when not in use. Keep away from food, feed and drinking water. Store away from heat (> 100 F) and keep from freezing (< 35 F)

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm): .

COMPONENT	OSHA PEL	ACIGH TLV
Sodium Salt of fomesafen	Not listed	Not listed
Ammonium salt of imazethapyr	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 goggles or full face respirator if vapors cause eye discomfort.
CLOTHING – long-sleeved shirt and long pants, Shoes plus socks.
GLOVES – Chemical resistant gloves made of any waterproof material.
RESPIRATOR - When handling in enclosed areas where exposure limits may be exceeded, use a respirator with either an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and 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:	Greenish brown clear liquid
Odor:	Slightly ammonium-like odor
pH:	6.85 – 7.85
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:	<4 x 10-3 mPa (20°C) (Fomesafen) <0.013 mP (60°C) (Imazethapyr)
Vapor Density:	Not applicable
Density:	1.13 – 1.17 g/ml (9.43 – 9.76 lb/gl)*
Solubility:	Emulsifies
Partition Coefficient:	log Pow = 3.4 (pH 4) (Fomesafen) log Pow = 1.04 (pH 5), 1.49 (pH 7), 1.20 (pH 9) (all 25°C) (Imazethapyr)
Auto-Ignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	180.0 cSt (20°C); 56.1 cSt (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 under normal conditions.

HAZARDOUS REACTION/POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Avoid excessive heat.

INCOMPATIBLE MATERIALS: Oxidizing agents and acids

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may release toxic gases such as HCl

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD_{50} (rat)	3,129 mg/kg
Dermal LD_{50} (rat)	>5,000 mg/kg
Inhalation LC_{50} (rat)	0.53 – 2.08 mg/L
Eye Irritation (rabbit)	Severely irritating
Skin Irritation (rabbit)	Slightly irritating
Sensitization (guinea pig)	Not a contact sensitizer

CARCINOGEN STATUS:

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

TERATOGENICITY:

MUTAGENICITY: Fomesafen and imazethapyr are not known to be mutagenic

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 when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FATE: Fomesafen is very persistent and mobile in soil depending on soil type and weather conditions. Imazethapyr is moderately persistent and mobile in soil.

FISH TOXICITY: (imazethapyr)

96 hour LC_{50}, Rainbow trout –	112 mg/L
96 hour LC_{50}, Bluegill –	unknown

AVIAN TOXICITY: (imazethapyr)

Oral LD_{50}, Bobwhite quail –	>4,000 ppm
Oral LD_{50}, Mallard duck –	>4,000 ppm

HONEY BEE: > 100 ug/bee

FISH TOXICITY: (fomesafen)

96 hour LC_{50}, Rainbow trout -	680 ppm
96 hour LC_{50}, Bluegill -	1,500 ppm

AVIAN TOXICITY: (fomesafen)

Dietary LC_{50}, Bobwhite quail -	> 20,000 mg/Kg
Dietary LC_{50}, Mallard duck –	> 20,000 mg/Kg

HONEY BEE: Unknown

SECTION 13 - DISPOSAL CONSIDERATIONS

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

WASTE: Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations at an approved facility.

CONTAINER: Do not reuse container. Triple rinse (or equivalent). Then offer for recycling, reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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:	None
SARA TITLE III STATUS:	
311/312 Hazard Categories –	Immediate, Chronic Health
313 Toxic Chemicals –	Fomesafen sodium salt and aqueous ammonium solution
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	2
	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