SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: EMERGENCY TELEPHONE NUMBERS:

ALBAUGH, LLC (800) 424-9300 (CHEMTREC, transportation and spills)

Ankeny, IA 50021

PRODUCT NAME : SPUR
CHEMICAL NAME : Clopyralid
PRODUCT USE : Herbicide

PRODUCT CODE : EPA Reg. No 42750-89

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

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

Amber brown liquid.

HEALTH HAZARDS: Harmful If Absorbed Through Skin. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist.

PHYSICAL HAZARDS: Combustible liquid. May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS:

Highly mobile is certain soil types.



SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER
Clopyralid monoethanolamine	40.9	57754-85-5
Inert ingredients, including isopropanol	59.1	67-63-0

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 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 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.

NOTE TO PHYSICIAN: No specific 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				2	
FLAMMABIL	ITY			2	
REACTIVITY	1			1	
4=Severe	3=Serious	2=Moderate		1=Slight	0=Minimal

FLASHPOINT: 45.4°C (114°F)

EXTINGUISHING MEDIA: Use alcohol resistant foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE AND EXPLOSION HAZARD: Combustible Liquid. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

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.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece and protective clothing.

Minimize use of water to prevent environmental contamination

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, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist.

STORAGE: Store in original container with lid tightly closed. Keep away from food, feed and drinking water. Combustible liquid, store in a well ventilated, dry place away from heat and other sources of ignition. Store above 20° F or warm to 40° F and agitate before use.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

COMPONENT	OSHA PEL	ACIGH TLV
Clopyralid monoethanolamine	Not listed	Not listed
Inert ingredients, including isopropanol	400 ppm	400 ppm

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. 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 - Protective eyewear. 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.

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: Amber brown liquid

Odor: Sweet odor pH: 6.9 - 7.9**Melting Point:** Not applicable **Boiling Point:** No data 45.4°C Flash Point: **Evaporation Rate:** No data Flammability: No data

No data **Vapor Pressure:** 1.33 mPa (pure, 24°C) (Clopyralid acid)

Vapor Density: Not applicable

1.15 - 1.19 g/ml (9.6 - 9.9 lb/gl)* Density:

Solubility: **Emulsifies**

Flammability Limits:

Partition Coefficient: log Pow = -1.81 (pH 5), -2.63 (pH 7), -2.55 (pH 9), 1.07 (unionized, 25°C)

(Clopyralid acid)

No data **Auto-Ignition Temperature: Decomposition Temperature:** No data

Viscosity: 7.27 cSt (20°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 releasing hydrogen chloride, oxides of nitrogen, chlorinated pyridine and other gasses.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Combustible. Avoid temperatures above (105°F, 40°C) and below 35°F (-2°C).

INCOMPATIBLE MATERIALS: Acidic and oxidizing materials, halogenated organics, brass, copper, zinc and aluminum metals.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

 $\begin{array}{lll} \text{Oral LD}_{50} \ (\text{rat}) & >5000 \ \text{mg/kg} \\ \text{Dermal LD}_{50} \ (\text{rat}) & >2000 \ \text{mg/kg} \\ \text{Inhalation LC}_{50} \ (\text{rat}) & >2.12 \ \text{mg/L} \end{array}$

Eye Irritation (rabbit) Minimally irritationg
Skin Irritation (rabbit) Slightly irritating

Sensitization (guinea pig) Not a contact sensitizer

CARCINOGEN STATUS:

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

TERATOGENICITY: Not known to exhibit reproductive or teratogenic (birth defect) effects.

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, 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 contaminate water used for irrigation or domestic purposes.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils that would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

FATE: Clopyralid MEA salt disassociates to the parent acid rapidly in the environment is moderately persistent in the soil with a half-life of 1 to 12 months depending on soil type and other conditions. Do not use plants treated with clopyralid for compost or mulch.

FISH TOXICITY: (Acid Technical)

96 hour LC₅₀, Rainbow trout - >100 mg/L96 hour LC₅₀, Bluegill - >100 mg/L **AVIAN TOXICITY: (Acid Technical)**

Dietary LC₅₀, Bobwhite quail - > 4,640 ppm Dietary LC₅₀, Mallard duck - > 4,640 ppm

BEE TOXICITY: > 100 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

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

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

CONTAINER DISPOSAL: <u>Non-refillable container.</u> Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. <u>Refillable container.</u> Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Refer to the container label to determine if it is refillable and for complete cleaning and disposal instructions.

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION:

(ground transport)

Containers < 119 gallons - Not regulated by DOT

Containers > 119 gallons - NA1993, Combustible Liquid, N.O.S. (contains isopropanol), PG III

DOT HAZARD CLASS:Combustible Liquid

IDENTIFICATION NUMBER: NA1993 **DOT PACKING GROUP:** PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: Not Listed

SARA TITLE III STATUS:

311/312 Hazard Categories – Immediate & delayed health hazard

313 Toxic Chemicals – Isopropanol

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	
	FLAMMABIL	JTY			2	
	PHYSICAL H	HAZARD			1	
	4=Severe	3=Serious	2=Mc	oderate	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: October, 2014

REFERENCE: Update for GHS compliance