

**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 :** TRICLOPYR 4E  
**CHEMICAL NAME :** Triclopyr butoxyethyl ester  
**PRODUCT USE :** Herbicide  
**PRODUCT CODE :** EPA Reg. No 42750-126

**SECTION 2 - HAZARDS IDENTIFICATION SUMMARY**

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

Light yellow clear liquid

**HEALTH HAZARDS:** Moderate eye irritant.  
Potential skin sensitizer from exposure to concentrate.

**PHYSICAL HAZARDS:** May release toxic fumes if burned.

**ENVIRONMENTAL HAZARDS:** Triclopyr is highly toxic to certain terrestrial plant and aquatic organisms in its ester form.

**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER
Triclopyr Butoxy Ethyl Ester	61.6	64700-56-7
Petroleum distillates*	> 25.0	64742-94-5
Naphthalene (*contained)	2 – 5	91-20-3

**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 SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. 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. Do not give liquid to the person.

**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 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:** May cause chemical pneumonitis if aspirated. If lavage is performed, suggest endotracheal and/or esophagosopic control.

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

**FLASHPOINT:** 142°F (61°C)**EXTINGUISHING MEDIA:** Use foam, dry chemical, carbon dioxide, or water spray when fires involve this material.**FIRE AND EXPLOSION HAZARD:** May decompose in fire due to thermal decomposition, releasing toxic gases.**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. 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!

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

**HANDLING:** Use only in a well-ventilated area.**STORAGE:** Store above 28°F or agitate before use. 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.

**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION****EXPOSURE LIMITS (8 hour TWA, ppm):**

COMPONENT	OSHA PEL	ACIGH TLV
Triclopyr BEE ester	Not listed	Not listed
Naphthalene	10 ppm	10 ppm

**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, face shield or full face respirator if vapors cause eye discomfort.

**CLOTHING** - Long-sleeved shirt and long pants, Shoes plus socks.

**GLOVES** – Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC) or viton.

**RESPIRATOR** - When handling in enclosed areas use a respirator approved for pesticides.

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/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>	Light yellow clear liquid
<b>Odor:</b>	Paint like odor
<b>pH:</b>	3.65 – 4.65
<b>Melting Point:</b>	Not applicable
<b>Boiling Point:</b>	No data
<b>Flash Point:</b>	142°F (62°C)
<b>Evaporation Rate:</b>	No data
<b>Flammability:</b>	No data
<b>Flammability Limits:</b>	No data
<b>Vapor Pressure:</b>	0.2 mPa (25°C) (Triclopyr)
<b>Vapor Density:</b>	Not applicable
<b>Density:</b>	1.15 – 1.21 g/ml (9.60 – 10.10 lb/gl)*
<b>Solubility:</b>	Emulsifies
<b>Partition Coefficient:</b>	log P <sub>ow</sub> = 0.42 (pH5), -0.45 (pH7), -0.96 (pH9) (Triclopyr)
<b>Auto-Ignition Temperature:</b>	No data
<b>Decomposition Temperature:</b>	No data
<b>Viscosity:</b>	14.49 cSt (20°C); 6.7 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, however may decompose if heated.

**HAZARDOUS REACTION/POLYMERIZATION:** Product will not undergo polymerization.

**CONDITIONS TO AVOID:** Avoid temperatures above (105°F, 40°C) and below 30°F (6°C).

**INCOMPATIBLE MATERIALS:** Strong acids and oxidizing materials.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May decompose to hydrogen chloride, oxides of nitrogen and phosgene when burning.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Acute toxicity values from a similar but not identical formulation.

**ACUTE TOXICITY:**

Oral LD <sub>50</sub> (rat)	- >1,000 mg/Kg
Dermal LD <sub>50</sub> (rat)	- >2,000 mg/Kg
Inhalation LC <sub>50</sub> (rat)	- >4.0 mg/L
Eye Irritation (rabbit)	- Slight irritant
Skin Irritation (rabbit)	- Moderate irritant
Sensitization (guinea pig)	- Potential sensitizer from prolonged or repeated exposure.

**CARCINOGEN STATUS:**

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

**TERATOGENICITY:** Evidence of reproductive and developmental toxicity only at maternally toxic doses

**MUTAGENICITY:** Little evidence of mutagenic effects during in vivo or in vitro studies.

**SECTION 12 - ECOLOGICAL INFORMATION**

**ENVIRONMENTAL SUMMARY:** This pesticide is toxic to fish. 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 or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**FATE:** Triclopyr BEE ester rapidly hydrolyzes to the parent acid. Triclopyr acid is slightly persistent with a soil half life of 2 to 6 weeks depending on soil type and weather conditions. Triclopyr acid is water soluble and mobile in soil.

**FISH TOXICITY: (BEE ester formulation)**

96 hour LC <sub>50</sub> , Rainbow trout –	1.3 ppm
96 hour LC <sub>50</sub> , Bluegill -	1.5 ppm

**AVIAN TOXICITY:** (BEE ester formulation)

Dietary LC<sub>50</sub>, Bobwhite quail – > 9,000 ppm  
 Dietary LC<sub>50</sub>, Mallard duck – > 10,000 ppm

**BEE TOXICITY:** (triclopyr acid) – > 100 ug/bee

**SECTION 13 - DISPOSAL CONSIDERATIONS**

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

**PESTICIDE DISPOSAL:** Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable federal, state, or local procedures.

**CONTAINER DISPOSAL:** Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

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

**SECTION 14 - TRANSPORT INFORMATION****SHIPPING DESCRIPTION:****US DOT (Ground transport)**

Containers ≤ 119 gallons - Not regulated by DOT  
 Containers > 119 gallons - NA1993, Combustible Liquid, N.O.S., (contains petroleum distillates), PG III

**IMDG (Marine transport)**

Containers ≤ 119 gallons - Not regulated by DOT  
 Containers > 119 gallons - NA1993, Combustible Liquid, N.O.S., (contains petroleum distillates), PG III

**IATA/ICAO (Air transport)**

Containers ≤ 119 gallons - Not regulated by DOT  
 Containers > 119 gallons - NA1993, Combustible Liquid, N.O.S., (contains petroleum distillates), PG III

**DOT HAZARD CLASS:**

Combustible Liquid (> 119 gallons)

**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, Fire Hazard  
 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	2
	FLAMMABILITY	2
	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:**            October, 2016

**REFERENCE:**              Update flash point in Section 5 and Section 9 and add marine and air transport information to Section 14