

**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 : **TRIFLURALIN 10G**  
 CHEMICAL NAME : Trifluralin  
 PRODUCT USE : Herbicide  
 PRODUCT CODE : EPA Reg. No 42750-34

**SECTION 2 - HAZARDS IDENTIFICATION SUMMARY**

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

Golden granular solid

**HEALTH HAZARDS:** Causes moderate eye irritation. Harmful if swallowed.

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

**ENVIRONMENTAL HAZARDS:**  
Very toxic to aquatic life.

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

COMPONENT	PERCENTAGE	CAS NUMBER
Trifluralin	10.0 %	1582-09-8
Inert Ingredients	90.0 %	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 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.

**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.

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

**FLASHPOINT:** Not applicable

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

**FIRE AND EXPLOSION HAZARD:** Can form explosive mixtures at temperatures at or above the flashpoint. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

**FIRE FIGHTING INSTRUCTIONS:** Evacuate nonessential persons from area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Explosive vapor could form from ruptured containers. 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 run off.

**FIRE FIGHTING EQUIPMENT:** Full fire fighting turn-out gear (Bunker gear) including self-contained breathing equipment.

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:** Vacuum or sweep up material and place in a container for reuse or disposal.

**LARGE SPILL:** Avoid creating dust cloud. Vacuum or sweep up material and place in a container for reuse or disposal. Reduce airborne dust and prevent scattering by moistening with water. Pick up wash liquid with additional absorbent and place in a disposable container. After removal, flush contaminated area thoroughly with water.

**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.

**STORAGE:** Store in original container only in a well ventilated, dry place away from heat and other sources of ignition. Keep away from food, feed and drinking water.

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

COMPONENT	OSHA PEL	ACIGH TLV
Trifluralin	Not listed	Not listed

**ENGINEERING CONTROLS:** Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. 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.

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

GLOVES - Chemical-resistant gloves such as barrier laminate or viton.

RESPIRATOR - When handling in enclosed areas where exposure limits may be exceeded, 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 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**

<b>Appearance:</b>	Golden granular solid
<b>Odor:</b>	No data
<b>pH:</b>	8.2 – 9.2
<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>	6.1 mPa (25°C) (Trifluralin)
<b>Vapor Density:</b>	Not applicable
<b>Density:</b>	1.15 – 1.21 g/ml (9.60 – 10.10 lb/gl)*
<b>Solubility:</b>	Disperses
<b>Partition Coefficient:</b>	log Pow = 4.83 (20°C) (Trifluralin)
<b>Auto-Ignition Temperature:</b>	No data
<b>Decomposition Temperature:</b>	No data
<b>Viscosity:</b>	Not applicable

\*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 storage conditions.

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

**CONDITIONS TO AVOID:** Avoid temperatures above 100°F (38°C) or below 32 F (0 C).

**INCOMPATIBLE MATERIALS:** Strong oxidizing materials.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of nitrogen and carbon, fluorinated hydrocarbons.

**SECTION 11 - TOXICOLOGICAL INFORMATION****ACUTE TOXICITY:**

Oral LD <sub>50</sub> (rat)	>5,000 mg/Kg
Dermal LD <sub>50</sub> (rat)	>5050 mg/Kg
Inhalation LC <sub>50</sub> (rat)	>2.65 mg/L
Eye Irritation (rabbit)	unwashed – Toxicity Category III; washed – Toxicity Category IV
Skin Irritation (rabbit)	Toxicity Category IV
Sensitization (guinea pig)	Not a contact sensitizer

**CARCINOGEN STATUS:**

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

**TERATOGENICITY:** Developmental effects only noted at maternally toxic doses.

**MUTAGENICITY:** Weight of evidence indicates Trifluralin is non-mutagenic.

**SECTION 12 - ECOLOGICAL INFORMATION**

**ENVIRONMENTAL SUMMARY:** This pesticide is extremely toxic to freshwater, marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. Do not apply in a manner which will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. 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 cleaning equipment or disposing of equipment washwaters.

**FATE:** Trifluralin is moderately persistent with a soil half-life of 6-8 months depending on soil type and weather conditions. It is highly adsorptive and relatively immobile in soil.

**FISH TOXICITY: (Technical)**

96 hour LC <sub>50</sub> , Rainbow trout –	0.41 ppm
96 hour LC <sub>50</sub> , Bluegill –	0.58 ppm

**AVIAN TOXICITY: (Technical)**

Dietary LC <sub>50</sub> , Bobwhite quail -	> 5,000 ppm
Dietary LC <sub>50</sub> , Mallard duck -	> 5,000 ppm

**BEE TOXICITY: (Technical)** > 100 ug/bee (contact)

**SECTION 13 - DISPOSAL CONSIDERATIONS**

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

**PESTICIDE WASTE:** Pesticide wastes are acutely hazardous. Dispose of in accordance with applicable Federal, state and local laws and regulations.

**CONTAINER HANDLING:** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of bags in sanitary landfill or by incineration, in accordance with applicable regulations, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refer to product label for complete cleaning and disposal instructions.

**SECTION 14 - TRANSPORT INFORMATION****SHIPPING DESCRIPTION:**

(Ground transport)

Containers < 100 lbs: Not regulated by DOT

Containers  $\geq$  100 lbs: UN3077, Environmentally Hazardous Substances, Solid, N.O.S., 9, PG III, RQ (Trifluralin)

**DOT HAZARD CLASS:** Class 9  
**IDENTIFICATION NUMBER:** UN3077  
**DOT PACKING GROUP:** PG III

**SECTION 15 - REGULATORY INFORMATION**

**CERCLA REPORTABLE QUANTITY:** Trifluralin RQ 10 lbs (100 lbs of product),

**SARA TITLE III STATUS:**

311/312 Hazard Categories - Immediate and Delayed Health  
313 Toxic Chemicals - Trifluralin

**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:** October, 2014

**REFERENCE:** Revised for GHS compliance