

MATERIAL SAFETY DATA SHEET

SENTRY TRIFLURALIN 4EC



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

UNITED SUPPLIERS, INC.
BOX 538
Eldora, IA 50627

EPA REG. NO.: 33270-17

PRODUCT NAME: SENTRY TRIFLURALIN 4EC

CHEMICAL NAME: α,α,α -trifluoro-2,6-dinitro-*N,N*-dipropyl-*p*-toluidine

CHEMICAL FAMILY: Herbicide

EMERGENCY CONTACT: In the event of chemical emergencies involving a spill, leak, fire exposure, or accident involving chemicals -- call **CHEMTREC (800) 424-9300**.

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION: Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. In case of contact, wash skin with soap and water; for eyes, flush with water for 15 minutes and get medical attention.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Trifluralin	43.0	1582-09-8	Not Listed
Naphthalene	4.0	91-20-3	10ppm; 15ppm STEL
1,2,4-Trimethylbenzene	3.0	95-63-6	Not Listed
Other ingredients	50.0	-----	-----

4. FIRST AID MEASURES

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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Have person sip a glass of water if able to swallow. 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 by mouth-to-mouth, if possible. 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.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT have the product container or label with you when calling a poison control center or doctor. For an emergency endangering health or the environment involving this product, call 1-800-992-5994.

5. FIRE FIGHTING MEASURES

FLASH POINT ($^{\circ}$ F/Test Method): 160 $^{\circ}$ F

FLAMMABLE LIMITS (LFL & UFL): Not established

EXTINGUISHING MEDIA: Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers, foam, alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: nitrogen oxides, hydrogen fluoride, carbon monoxide, carbon dioxide and fluorinated hydrocarbons.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. 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 runoff.

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

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full fire fighting turn-out gear (Bunker gear).

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Pick up spilled liquid with absorbent material and sweep up for disposal. Prepare it and damaged unusable containers for proper disposal in accordance with all federal, state and local regulations. **NOTE:** Prevent

spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water. Always wear proper protective equipment when working with the product.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, and 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 the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in original container only. Avoid freezing. Store above 40°F. If frozen, poor weed control may result. Do not store near heat or flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit.

EYE PROTECTION: Wear chemical goggles or shielded safety glasses when handling and mixing product.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks and chemical-resistant gloves. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

Personal Protective Equipment (PPE): Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear: Long-sleeved shirt and long pants, Chemical-resistant gloves such as Nitrile, Butyl, Neoprene, or Barrier Laminate, Shoes plus socks and Protective eyewear.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Orange liquid, Aromatic

SPECIFIC GRAVITY (Water=1): 1.00 – 1.10 g/ml

VAPOR PRESSURE: Not established

PERCENT VOLATILE (by volume): Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

SOLUBILITY: Emulsifies **pH:** Not Available

BULK DENSITY: 8.34 – 9.17 lbs/gal.

BOILING POINT: (solvent): 365 – 399°F (185 – 204°C)

EVAPORATION RATE: Not established

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid temperatures above 230°F (110°C). The active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid.

INCOMPATIBILITY: Oxidizers.

HAZARDOUS POLYMERIZATION: Will not occur.

THERMAL DECOMPOSITION: Decomposition products depend on temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: nitrogen oxides, and fluorinated hydrocarbons. Gases are released during decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀: >3,000 mg/kg (female)

Eye Irritation: May cause moderate irritation

Inhalation LC₅₀: ~5.0 mg/L air

Carcinogenic Potential: Napthalene; NTP-Possible Carcinogen 2B; IARC-Anticipated Carcinogen.

Acute Dermal LD₅₀: >4,000 mg/kg

Skin Irritation: May cause minimal irritation

Skin sensitization: may cause allergic skin reaction.

12. ECOLOGICAL INFORMATION

Based largely or completely on information for the active ingredient.

Material is very highly toxic to aquatic organisms on an acute basis (LC₅₀ or EC₅₀ <0.1 mg/L in most sensitive species).

Material is practically non-toxic to birds on an acute basis (LD₅₀ >2000 mg/kg).

Material is practically non-toxic to birds on a dietary basis (LC₅₀ >5000 ppm).

Based largely or completely on information for naphthalene.

Material is highly toxic to fish on an acute basis (LC₅₀ or EC₅₀ is between 0.1 and 1 mg/L).

Material is moderately toxic to aquatic invertebrates on an acute basis (LC₅₀ or EC₅₀ is between 1 and 10 mg/L).

Based largely or completely on information for 1,2,4-trimethylbenzene.

12. ECOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION (Continued)

Material is moderately toxic to aquatic invertebrates on an acute basis (LC₅₀ or EC₅₀ is between 1 and 10 mg/L in the most sensitive species tested).

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

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers 5 gallons or larger:

Container Disposal: Refillable container. 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. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times, Then offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

14. TRANSPORT INFORMATION

DOT Non-Bulk

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES LIQUID, N.O.S.

Technical Name: TRIFLURALIN

Hazard Class: 9 **ID Number:** UN3082

Packing Group: PG III

DOT Bulk

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.

Technical Name: TRIFLURALIN, NAPHTHALENE

Hazard Class: 9 **ID Number:** UN3082

Packing Group: PG III

15. REGULATORY INFORMATION

NFPA RATINGS: Least = 0 Slight = 1 Moderate = 2 High = 3 Severe = 4
Ratings for this product: Health – 2 Flammability – 1 Reactivity – 1 Special Hazards – None Specified

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed Y Reactive N

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Reportable Quantity (RQ) under U.S. CERCLA: Trifluralin 10lb; Naphthalene 100lb.

SARA, Title III, Section 313: Trifluralin, CAS #1582-09-8, 43%; Naphthalene, CAS #91-20-3, 4%

CA Proposition 65: WARNING: This product contains a chemical(s) known to the State of California to be a carcinogen. The chemical is naphthalene.

16. OTHER

Date of Issue: 11/7/2011 Supersedes: New

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