



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
INNICTIS CROP CARE LLC
1220 W ASH STREET, SUITE B
WINDSOR, CO 80550

EPA REG. NO.: 89167-43-89391

PRODUCT NAME: QUIVER
CHEMICAL NAME: S, S, S-TRIBUTYL PHOSPHOROTRITHIOATE
CHEMICAL FAMILY: Herbicide
Hotline Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION SUMMARY

DANGER. CORROSIVE. Causes skin burns and irreversible eye damage. May be fatal if absorbed through skin or swallowed. Harmful if inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Tribufos	70.5	78-48-8	
Other ingredients, Including (Naphthalene)	29.5 (1-5)	91-20-3	TWA, 10ppm; STEL 15ppm

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 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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person. 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT have the product container or label with you when calling a poison control center or doctor.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): > 180°F

FLAMMABLE LIMITS (LFL & UFL): Not available

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide or water spray.

HAZARDOUS COMBUSTION PRODUCTS: Toxic fumes may be emitted in a fire situation.

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.

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. Place it and damaged unusable containers in a landfill appropriate for chemical waste. Check local, state and federal regulations for proper disposal. **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. Always wash protective clothing before reuse.

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 a cool, dry place, away from open flame and extreme heat, and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking, invert to prevent leakage. If the container is leaking or material is spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type materials and dispose of as directed below. In spill or leak incidents, keep unauthorized people away.

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. If TLV is exceeded wear a NIOSH approved respirator.

EYE PROTECTION: Wear chemical resistant 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): Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Light yellow liquid, pungent odor

SOLUBILITY: Emulsifies **pH:** 8.5

SPECIFIC GRAVITY (Water=1): 1.018 g/cm³

BULK DENSITY: 8.49 lbs./gal.

VAPOR PRESSURE: Not determined

BOILING POINT: Not determined

PERCENT VOLATILE (by volume): Not determined

EVAPORATION RATE: Not determined

FREEZING POINT: 32°F (0°C)

VISCOSITY: 10.84 CST

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.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Heat, flame, sparks, elevated temperatures.

INCOMPATIBILITY: Strong oxidizers, acids and bases.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, hydrogen and phosphorous.

11. TOXICOLOGICAL INFORMATION – (Based on a similar product)

Acute Oral LD₅₀: 349 mg/kg (Female Rat) and 570 mg/kg (Male)

Acute Dermal LD₅₀: >2,000 mg/kg (Rabbit)

Eye Irritation: Corrosive

Skin Irritation: Corrosive

Inhalation LC₅₀: >2.34 mg/L

Skin sensitization: Not a contact sensitizer

Carcinogenic Potential: Naphthalene is listed as a possible human carcinogen by IARC (Group 2B)

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

ENVIRONMENTAL SUMMARY: This product is toxic to terrestrial and aquatic plants, fish and aquatic invertebrates. 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 where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters or rinsate.

13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT REGULATION: UN 3018, Organophosphorous pesticides, liquid, toxic (Tribufos) 6.1, 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 – 0

Special Hazards – None Specified

MATERIAL SAFETY DATA SHEET

QUIVER

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

Section 313 Toxic Chemical(s): Tribufos 70.5% (CAS No. 78-48-8); Naphthalene 1% to 5% (CAS No. 91-20-3)

Reportable Quantity (RQ) under U.S. CERCLA: Naphthalene 100 lbs. ((Product 2,000 – 10,000 lbs.) 5% to 1%)

CA Proposition 65: This product contains Naphthalene, a chemical known to the State of California to cause cancer.

16. OTHER

Date of Issue: 06/09/14 Supersedes: 04/30/14

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