

SAFETY DATA SHEET

Quali-Pro Dithiopyr 2 L

1. IDENTIFICATION

Product name: Quali-Pro Dithiopyr 2 L
 Product type: Herbicide
 EPA Registration No.: 53883-311
 Chemical name of active ingredient(s): Dithiopyr: 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester
 Manufacturer/Registrant: Control Solutions, Inc.
 5903 Genoa-Red Bluff
 Pasadena, TX 77507

For fire, spill, and/or leak emergencies, contact Chemtrec: Phone: 1-800-424-9300
 For medical emergencies and health and safety inquiries, contact Safety Call: Phone: 1-866-897-8050
 Poison Control Center Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

	Acute oral	Acute dermal	Acute inhalation	Eye irritation	Skin irritation	Skin Sensitization
Category	NC	NC	NC	2A	2	NC

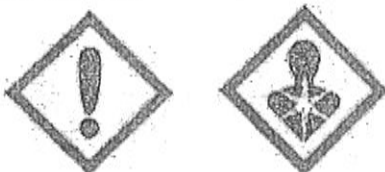
NC: Not classified

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

- Cause serious eye irritation
- Suspected of developmental and reproductive effects

PICTOGRAM:



PRECAUTIONARY STATEMENTS: Wash hands thoroughly after handling. Wear eye protection and face protection. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice. Wear protective gloves. If on skin: wash with plenty of water. If skin irritation occurs: get medical advice: Take off contaminated clothing and wash it before reuse.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and protective clothing, eye and face protection. If exposed or concerned: get medical advice. Store locked up

Contact Safety Call® International for emergency medical treatment at (866) 897-8050.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Dithiopyr	97886-45-8	23.8	NE	NE	NE	NA
Cyclohexanone	108-94-1	13.0	50 ppm 200 mg/m ³ (TWA)	20 ppm (TWA) 50 ppm (STEL, skin)	25 ppm 100 mg/m ³ (TWA)*	IARC - 3**
2-Ethylhexanol	104-76-7	1.9	NE	NE	NE	NA

NE=Not established; NA=Not applicable.

* NIOSH REL

** IARC Group 3: Not classifiable as to its carcinogenicity to humans.

4. FIRST AID MEASURES

FIRST AID

IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • 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 ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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 further treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall[®] at (866) 897-8050 for emergency medical treatment information.</p>	

5. FIRE FIGHTING MEASURES

FLASH POINT: 146°F (63.3°C)

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water fog, CO₂, foam, dry chemical.

FIRE & EXPLOSION HAZARDS: Pesticide fires have potential to emit hazardous decomposition products.

FIRE-FIGHTING PROCEDURES: Isolate fire area and evacuate downwind. DO NOT breathe gases, smoke or vapors generated. Wear self-contained breathing apparatus and full-protective clothing.

HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Contain spill. Remove as much product as possible by absorbing with inert material. Scrub area with a hard water detergent. Remove any contaminated soil. Place in closed, labeled containers and store in a safe place until disposed. Do not contaminate water while cleaning equipment or disposing of wastes. This product is toxic to fish. Keep out of lakes,

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streams or ponds. Use proper protective equipment to minimize exposure. Take all necessary actions to prevent and to remedy the adverse effects of the spill. Ensure that the disposal is in compliance with federal requirements and state or local regulations.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Carefully open containers and after partial use close container tightly. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original container in dry, cool, secured storage area. Store this product above 32°F to avoid crystallization. If crystals form or product freezes, move product to area with ambient temperature above 32°F and shake well until crystals have dissolved.

STORAGE TEMPERATURE (MIN/MAX): Above 32°F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Protective eyewear or chemical safety glasses with side shields or chemical goggles when working in non-ventilated spaces.

HAND PROTECTION: Chemical-resistant gloves.

SKIN PROTECTION: Long-sleeve shirt, long pants, shoes plus socks.

RESPIRATOR REQUIREMENTS: For most conditions, no respiratory protection should be needed; however, if handling without sufficient ventilation, use NIOSH approved air-purifying respirator with any N, P or R95 class filter and an organic vapor cartridge.

VENTILATION: Whenever possible, adequate ventilation should be used to minimize the need for personal protective equipment.

ADDITIONAL PROTECTIVE MEASURES:

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

USER SAFETY RECOMMENDATIONS:

Users Should:

- 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 the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 3.

ENGINEERING CONTROLS: Refer to product label. Minimize airborne concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Dark brown liquid *

ODOR: Sweetish

pH: 3.25 (1% dispersion)

FLASH POINT: 146°F (63.3°C)

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SPECIFIC GRAVITY: 1.014 g/cc (8.46 lb/gal) at 25°C; 1.000 g/cc (8.35 lb/gal) at 39°C
VISCOSITY (centipoise): 9.83 at 25°C; 6.10 at 39°C

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions. Store above 32°F.

MATERIALS OR CONDITIONS TO AVOID: Oxidizing agent. Avoid excessive heat.

HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD₅₀ (Rat): > 5,000 mg/kg

Acute Dermal LD₅₀ (Rabbit): > 2,020 mg/kg

Acute Inhalation LC₅₀ (Rat): > 2.34 mg/L/4 hr

Eye Irritation: Moderately irritating

Skin Irritation: Slightly irritating

Dermal Sensitization: Not a skin sensitizer

Chronic Toxicity/Carcinogenicity:

Dithiopyr: Did not cause cancer in laboratory animals.

Developmental Toxicity:

Dithiopyr: Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

2-ethylhexanol: Excessive ingestion of 2-ethylhexanol caused birth defects in laboratory animals only at doses toxic to the mother. Occupational exposure to 2-ethylhexanol by the inhalation or dermal routes poses no significant threat to the offspring in laboratory animals.

Cyclohexanone: Did not cause birth defects in laboratory animals.

Reproductive Toxicity:

Dithiopyr: In animal studies, dithiopyr did not interfere with reproduction.

Cyclohexanone: Caused reduced growth and survival of offspring in an animal reproduction study. Dose levels producing this effect also caused central nervous system effects in parental animals.

Carcinogenicity:

Cyclohexanone: IARC Group 3; Not classifiable as to its carcinogenicity to humans.

Genetic Toxicity:

Dithiopyr: Animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and run off from treated turf may be hazardous to aquatic organisms in water adjacent to treated areas. 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 when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

ECOTOXICOLOGICAL INFORMATION:

Dithiopyr: Material is highly toxic to aquatic on an acute basis (LC₅₀/EC₅₀ between 0.1 and 1 mg/L in the most sensitive species tested). Material is practically non-toxic to birds on an acute basis (LD₅₀>2,000 mg/kg). Material is practically non-toxic to birds on a dietary basis (LC₅₀>5,000 ppm)

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Rainbow trout LC₅₀ (96-h): 0.5 mg/l
Daphnia magna LC₅₀ (48-h): > 1.1 mg/l
Bobwhite LD₅₀ (oral): 2,250 mg/kg
Bobwhite LC₅₀ (dietary): > 5,620 ppm
Mallard LC₅₀ (dietary): > 5,620 ppm
Honey bee (LD₅₀) (contact): 80 µg/bee
Earthworm LC₅₀ (adult): > 1,000 mg/kg

Environmental Fate: Biodegradation may occur under aerobic conditions (in the presence of oxygen).

Cyclohexanone: Material is practically non-toxic to aquatic organisms on an acute basis (LC₅₀/EC₅₀/EL₅₀/LL₅₀ > 100 mg/L in the most sensitive species tested).

Golden orfe LC₅₀ (48-h, static): 630 mg/l

Daphnia magna EC₅₀ (24-h, immobilization): 820 mg/l

Environmental Fate: Material is readily biodegradable.

2-Ethylhexanol: Material is slightly toxic to aquatic organisms on an acute basis (LC₅₀/EC₅₀ between 10 and 100 mg/L in the most sensitive species tested).

Rainbow trout LC₅₀ (96-h): 32 – 37 mg/l

Daphnia magna LC₅₀ (48-h, lethality): 35.2 mg/l

Green alga EC₅₀ (growth rate inhibition, 72-h): 11.5 mg/l

Environmental Fate: Material is readily biodegradable.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

Ground Domestic (DOT):

Non-bulk: Not Regulated

Bulk: NA 1993, Combustible Liquid (contains solvent), PG III

Packaging size >or = 497 gallons: RQ, NA 1993, Combustible Liquid (contains solvent), PG III

Vessel (IMDG): UN3082, Environmentally Hazardous substances, liquid, n.o.s. (Dithiopyr), 9, PG III, Marine Pollutant

Air (IATA): UN3082, Environmentally Hazardous substances, liquid, n.o.s. (Dithiopyr), 9, PG III

15. REGULATORY INFORMATION

FIFRA INFORMATION:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

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WARNING Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes on skin or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear protective eye wear (goggle, face shield, or safety glasses), long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.
Section 311/312: Acute health hazard (immediate)
Chronic health hazard (delayed)
Section 313: Not applicable

CA PROPOSITION 65: Not applicable.

CERCLA RQ: Cyclohexanone RQ= 1,000 lbs. (Product= 497 gallons)

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

HAZARD RATINGS	NFPA	
HEALTH:	2	0 MINIMAL
FLAMMABILITY:	1	1 SLIGHT
REACTIVITY:	0	2 MODERATE
		3 HIGH
		4 SEVERE

MSDS DATE: 1-23-2013. Supersedes version dated 1-3-2012. Changes made to all sections.

The information and recommendations contained herein are based upon data believed to be correct. However, no warranty of any kind, expressed or implied, is made with respect to the information contained herein.