



# SAFETY DATA SHEET

## Quali-Pro Dithiopyr L

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### SECTION 1: IDENTIFICATION

**Product Name:** Quali-Pro Dithiopyr L  
**EPA Registration No.:** 53883-399  
**Recommended Use:** Herbicide; See product label for a complete list of uses and use sites.  
**Restrictions on Use:** See product label for any restrictions on the use of this product.  
**Chemical Family:** Pyridine  
**Chemical Name of Active Ingredient(s):** Dithiopyr: 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester  
**Manufactured for:** Control Solutions, Inc.  
5903 Genoa-Red Bluff  
Pasadena, TX 77507

**FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT: CHEMTREC 1-800-424-9300**

**FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT: Safety Call 1-866-897-8050**

### SECTION 2: HAZARD(S) IDENTIFICATION

**EMERGENCY OVERVIEW:** Transparent amber liquid with a strong ketone odor. Causes moderate eye irritation. Combustible liquid.

#### OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Eye Corrosion/Irritation	Category 2A
Flammable Liquid	Category 4

**Signal Word:** WARNING



**Hazard Statement(s):** Causes serious eye irritation.  
Combustible liquid.

#### Precautionary Statement(s):

- Prevention:** Wash hands thoroughly after handling.  
Wear protective gloves/eye protection.  
Keep away from flames and hot surfaces. – No smoking.
- Response:** **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/attention.  
**IN CASE OF FIRE:** Use foam, dry chemical, carbon dioxide or water spray to extinguish.
- Storage:** Store in a well-ventilated place. Keep cool.
- Disposal:** Dispose of contents/container in accordance with Federal, state and local laws and regulations.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS Number	Weight %
Dlthiopyr	97886-45-8	22.0%
Cyclohexanone	108-94-1	5.0 – 10.0%
2-ethylhexanol	104-76-7	5.0 – 10.0%

\*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

**SECTION 4: FIRST AID MEASURES**

<b>IF IN EYES:</b>	Hold eye open and rinse slowly and gently with water for 15 to 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.
<b>IF ON SKIN:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
<b>IF INHALED:</b>	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.
<b>IF INGESTED:</b>	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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most important symptoms/effects, acute and delayed:** Moderate eye irritation including redness, itching and tearing. Mild skin irritation possible.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Foam, dry chemical, carbon dioxide or water spray  
**Unsuitable Extinguishing Media:** Water jet  
**Hazardous Combustion Products:** Thermal decomposition may produce toxic carbon and nitrogen oxides.  
**Special Protective Equipment & Precautions:** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).  
**Unusual Fire & Explosion Hazards:** Flammable liquid

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** See Section 8 for personal protection equipment.  
**Environmental Precautions:** Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.  
**Methods for Containment:** Isolate the spill area and remove all sources of ignition. Keep unnecessary and unprotected personnel from entering. Absorb small spills with sand, vermiculite or other inert absorbent. Do not use combustible materials such as

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- sawdust or cloth rags. 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.
- Methods for Clean-up:** Place contaminated material in appropriate container for disposal. After removal, flush contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Do not put spilled material back in the original container.
- Other Information:** This product contains cyclohexanone and spills may require reporting under Federal, state or local laws and regulations.

**SECTION 7: HANDLING AND STORAGE**

- Handling:** RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes.
- Storage:** **See pesticide label for full information on product storage.** Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.
- Storage Temperature (Min/Max):** Store above 32°F and below 120°F.
- Product Incompatibilities:** Strong oxidizers

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

**Exposure Guidelines:**

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
Cyclohexanone	50 ppm / 200 mg/m <sup>3</sup> (TWA)	TWA: 20 ppm STEL: 50 ppm	25 ppm / 100 mg/m <sup>3</sup> (TWA)

- Engineering Controls:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.
- Respiratory Protection:** In areas of poor ventilation, use a NIOSH approved respirator with cartridges/canisters approved for organic vapors.
- Eye Protection:** Chemical goggles or safety glasses and full-face shield.
- Protective Gloves:** Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.
- Other Protective Clothing:** Long-sleeved shirt, long pants and shoes plus socks.
- General Safety Measures:** Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. Discard clothing and other absorbent materials that

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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.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Transparent amber liquid	<b>Upper/Lower Flammability Limits:</b>	Not determined
<b>Odor:</b>	Strong ketone	<b>Vapor Pressure:</b>	Not determined
<b>Odor Threshold:</b>	Not determined	<b>Vapor Density:</b>	Not determined
<b>pH (1% solution):</b>	3.0 – 3.5	<b>Density:</b>	1.0 – 1.015 g/cm <sup>3</sup>
<b>Melting /Freezing Point:</b>	Not determined	<b>Solubility:</b>	Not determined
<b>Boiling Point/Range:</b>	Not determined	<b>Partition Coefficient:</b>	Not determined
<b>Flash Point:</b>	146°F (63°C)	<b>Auto-ignition Temperature:</b>	Not determined
<b>Evaporation Rate:</b>	Not determined	<b>Decomposition Temperature:</b>	Not determined
<b>Flammability:</b>	Not applicable	<b>Viscosity:</b>	12.4 cP @ 25°C 7.73 cP @ 39°C

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity:</b>	None known
<b>Chemical Stability:</b>	Stable under normal storage and handling conditions.
<b>Possibility of Hazardous Reactions:</b>	No potential for hazardous reactions known.
<b>Conditions to Avoid:</b>	Temperatures below freezing. Sources of ignition.
<b>Incompatible Materials:</b>	Strong oxidizers
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may produce toxic carbon and nitrogen oxides.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Likely Routes of Exposure:</b>	Eye contact, Skin contact, Inhalation, Ingestion
<b>Symptoms of Exposure:</b>	Mild eye and/or skin irritation.
<b>Oral LD<sub>50</sub>:</b>	>5,000 mg/kg (Based upon similar product.)
<b>Dermal LD<sub>50</sub>:</b>	>2,020 mg/kg (Based upon similar product.)
<b>Inhalation LC<sub>50</sub>:</b>	>2.34 mg/L (4-hour)(Based upon similar product.)
<b>Eye Irritation/Damage:</b>	Causes moderate eye irritation clearing within 14 days (rabbit)(Based upon similar product.)
<b>Skin Corrosion/Irritation:</b>	Slightly irritating (rabbit)(Based upon similar product.)
<b>Skin Sensitization:</b>	Non-sensitizer (guinea pig)(Based upon similar product.)
<b>Chronic/Subchronic Toxicity:</b>	No data available on the mixture.
<b>Mutagenicity:</b>	No data available on the mixture.
<b>Reproductive Toxicity:</b>	Overexposure to cyclohexanone may cause reproductive disorder(s) based upon test with laboratory animals. Excessive ingestion of 2-ethylhexanol caused birth defects in laboratory animals only at doses toxic to the mother.
<b>Neurotoxicity:</b>	No data available on the mixture.
<b>Target Organs:</b>	In animals, dithiopyr has been reported to effect the liver, kidney, adrenal gland, thyroid, gall bladder and blood.

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**Aspiration Hazard:** Not anticipated to be an aspiration hazard.

**Carcinogenicity:** See below.

Chemical Name	ACGIH	IARC	NTP	OSHA
Cyclohexanone		Group 3		

**SECTION 12: ECOLOGICAL INFORMATION****Environmental Hazards Statement from FIFRA Regulated Pesticide Label:**

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 runoff 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.

**ECOTOXICITY DATA:**

<b>Fish Toxicity:</b>	Dithiopyr Technical: Rainbow Trout 96 hr LC <sub>50</sub> = 0.5 mg/L 2-Ethylhexanol: Golden orfe 96 hr LC <sub>50</sub> = 17.1 mg/L
<b>Aquatic Invertebrate Toxicity:</b>	Dithiopyr Technical: <i>Daphnia magna</i> 48 hr LC <sub>50</sub> >1.1 mg/L Cyclohexanone: <i>Daphnia magna</i> 24 hr EC <sub>50</sub> = 820 mg/L 2-Ethylhexanol: <i>Daphnia magna</i> 48 hr EC <sub>50</sub> = 39 mg/L
<b>Aquatic Plant Toxicity:</b>	No data available
<b>Avian Toxicity:</b>	No data available
<b>Honeybee Toxicity:</b>	Dithiopyr Technical: Contact LD <sub>50</sub> = 80 µg/bee

**ENVIRONMENTAL EFFECTS:**

<b>Persistence and Degradability:</b>	No data available
<b>Bioaccumulation:</b>	No data available
<b>Mobility:</b>	No data available
<b>Other Adverse Effects:</b>	No data available

**SECTION 13: DISPOSAL CONSIDERATIONS**

<b>Waste Disposal:</b>	<b>Refer to the pesticide label for full information on disposal.</b> Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water 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 in proper disposal methods.
<b>Container Disposal:</b>	<b>Refer to the pesticide label for full information on disposal.</b> When possible, triple rinse the container and offer for recycling if available.
<b>RCRA Characteristics:</b>	It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

**SECTION 14: TRANSPORTATION INFORMATION**

**DOT** Not regulated in packages less than 119 gallons. For packages greater than 119 gallons:  
**(Ground):** NA1993, Combustible Liquid, N.O.S (Cyclohexanone, 2-Ethylhexanol), COMB, PG III  
**IMDG** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Dithiopyr), 9, PGIII, Marine  
**(Sea):** Pollutant  
**IATA**  
**(Air):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Dithiopyr), 9, PGIII

**SECTION 15: REGULATORY INFORMATION**

**Labeling Requirements Under FIFRA:** 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 required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**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 eyewear (goggle, face shield, or safety glasses), long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves.

**TSCA Inventory:** This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

**SARA Title III Information:**

**Section 302 – Extremely hazardous substances:** None

**Section 311/312 – Hazard Categories:** Acute (Immediate); Fire

**Section 313 –** This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %	SARA 313 – Threshold Values (lbs)
None listed			

**CERCLA –** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
Cyclohexanone	108-94-1	5,000 lbs.	7,812 gallons

**CALIFORNIA PROPOSITION 65:**

Chemical Name	CAS Number	Prop 65 Category(ies)
None listed		

**U.S. STATE RIGHT-TO-KNOW REGULATIONS:**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol	X		X
2-ethylhexanol	X	X	X
Cyclohexanone	X	X	X

**SECTION 16: OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards 2</b>	<b>Flammability 2</b>	<b>Instability 0</b>	<b>Special Hazards – None</b>
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