



SAFETY DATA SHEET QUALI-PRO 2-D HERBICIDE

SECTION 1: IDENTIFICATION

Product Name: Quali-Pro 2-D Herbicide
EPA Registration No.: 66222-222
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: N/A – Multiple actives
Chemical Name of Triclopyr triethylamine salt
Active Ingredient(s): Clopyralid triethylamine salt
Manufactured for: Makhteshim Agan of North America, Inc.
3120 Highwoods Boulevard, Suite 100
Raleigh, NC 27604

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: Clear amber liquid with a faint alkaline-like odor. Causes severe eye irritation with potential for non-reversible damage. Harmful if swallowed or inhaled.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Eye Damage/Irritation	Category 1
Acute Inhalation Toxicity	Category 4
Acute Oral Toxicity	Category 4
Skin Sensitization	Category 1B
Flammable Liquids	Category 3

Signal Word:

DANGER



Hazard Statement(s):

Causes serious eye damage.
Harmful if inhaled.
Harmful if swallowed.
May cause allergic skin reaction.
Flammable liquid and vapor.

Precautionary Statement(s):

Prevention: Wear protective gloves/eye protection/face protection.
Avoid breathing mist/vapors/spray.
Use only outdoors or in a well ventilated area.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.

Response: **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center/doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
IF SWALLOWED: Call a poison control center/doctor if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see first aid section). Wash contaminated clothing before reuse.
IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 %
Triclopyr triethylamine salt	57213-69-1	33.0%
Clopyralid triethylamine salt	57754-85-5	12.1%

*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

IF IN EYES:	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.
IF ON SKIN:	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.
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 INGESTED:	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: Severe eye irritation with potential for long-term damage.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or water spray
Unsuitable Extinguishing Media: Water jet
Hazardous Combustion Products: Burning may produce hydrogen chloride, oxides of nitrogen and phosgene.
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: None known

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. Keep unnecessary and unprotected personnel from entering and eliminate sources of heat, sparks or flames. Absorb small spills with sand, vermiculite or other inert absorbent. Avoid use of combustible materials such as sawdust and 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: None known

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 28°F.
Product Incompatibilities: Strong acids and oxidizing materials.

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
No components listed			

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 pesticides.

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 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

Appearance:	Clear amber liquid	Upper/Lower Flammability Limits:	Not determined
Odor:	Faint alkaline-like	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH:	6.7 – 7.7	Relative Density (@24°C):	1.12 – 1.16
Melting /Freezing Point:	Not determined	Solubility:	Emulsifies
Boiling Point/Range:	Not determined	Partition Coefficient:	Not determined
Flash Point:	130.3°F (54.6°C)	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	14.8 cSt @ 20°C

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No hazardous chemical reactions known.
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: No potential for hazardous reactions known.
Conditions to Avoid: Avoid temperatures above 105°F and below 40°F.
Incompatible Materials: Strong acids and oxidizing materials.
Hazardous Decomposition Products: May decompose to hydrogen chloride, oxides of nitrogen and phosgene when burning.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact, Inhalation, Ingestion
Symptoms of Exposure: Severe eye irritation (eye contact), gastrointestinal irritation (ingestion).
Oral LD₅₀: 1,500 mg/kg (rat)
Dermal LD₅₀: >2,000 mg/kg (rat)
Inhalation LC₅₀: >1.0 mg/L (4-hour)(rat)
Eye Irritation/Damage: Severe irritation (rabbit)
Skin Corrosion/Irritation: Slight irritation (rabbit)
Skin Sensitization: Potential sensitizer

Chronic/Subchronic Toxicity: None known
Mutagenicity: Little evidence of mutagenic effects during in vivo or in vitro studies.
Reproductive Toxicity: Birth defects and developmental effects only at maternally toxic doses.
Neurotoxicity: None known
Target Organs: None known
Aspiration Hazard: Not anticipated to be an aspiration hazard.
Carcinogenicity: None known

Chemical Name	ACGIH	IARC	NTP	OSHA
No components listed				

SECTION 12: ECOLOGICAL INFORMATION

Environmental Hazards Statement from FIFRA Regulated Pesticide Label:

Triclopyr has properties and characteristics associated with chemicals detected in groundwater. The use of triclopyr in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer.

ECOTOXICITY DATA:

Fish Toxicity: Triclopyr amine: Rainbow Trout 96 hr LC₅₀ = 240 ppm
 Bluegill 96 hr LC₅₀ = 450 ppm

	Clopyralid acid: Rainbow Trout 96 hr LC ₅₀ >100 mg/L Bluegill 96 hr LC ₅₀ >100 mg/L
Aquatic Invertebrate Toxicity:	No data available
Aquatic Plant Toxicity:	No data available
Avian Toxicity:	Triclopyr amine: Bobwhite quail Oral LD ₅₀ = unknown Mallard duck Oral LD ₅₀ = 2,000 mg/kg Clopyralid acid: Bobwhite quail Oral LD ₅₀ >2,000 mg/kg Mallard duck Oral LD ₅₀ = 1,400 mg/kg
Honeybee Toxicity:	No data available

ENVIRONMENTAL EFFECTS:

Persistence and Degradability:	No data available
Bioaccumulation:	No data available
Mobility:	No data available
Other Adverse Effects:	No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:	Refer to the pesticide label for full information on disposal. 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.
Container Disposal:	Refer to the pesticide label for full information on disposal. When possible, triple rinse the container and offer for recycling if available.
RCRA Characteristics:	It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste. When disposed of as packaged, RCRA code D001 (ignitability) applies.

SECTION 14: TRANSPORTATION INFORMATION

DOT	Not regulated in containers less than 119 gallons. For containers of 119 gallons or greater:
(Ground):	NA1993, Combustible Liquid N.O.S., (triethylamine, ethanol), PG III
IMDG	
(Sea):	UN1993, Flammable Liquid N.O.S. (triethylamine, ethanol), 3, PGIII
IATA	
(Air):	UN1993, Flammable Liquid N.O.S. (triethylamine, ethanol), 3, 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:

DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed or inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Avoid breathing spray mist.

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); Delayed (Chronic); 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)
Triclopyr triethylamine	57213-69-1	33.0%	10,000

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
Ethylenediaminetetraacetate acid (EDTA)	60-00-4	5,000 lbs	20,833 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
Triclopyr triethylamine	X		

SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 2	Instability 0	Special Hazards – None
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