1. IDENTIFICATION

Product name: Quali-Pro® Quinclorac 75 DF

Chemical name of active ingredient(s): Quinclorac: 3,7-dichloro-8-quinolinecarboxylic acid

Manufacturer: Makhteshim Agan of North America, Inc. 4515 Falls of Neuse Road, Suite 300

Raleigh, NC 27609 Phone: 919-256-9300 Phone: 800-535-5053

For fire, spill, and/or leak emergencies,

contact Infotrac:

For medical emergencies and health and Phone: 1-877-250-9291

safety inquiries, contact Prosar:

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Quinclorac	84087-01-4	75	NE	NE	NA	Not listed
Inerts		25				
Including kaolin clay that may contain more than 0.1% crystalline silica			15 mg/m ³ (total) 5 mg/m ³ (respirable)	2 mg/m ³ (respirable)	NA	NA

NA=Not available. NE=Not established.

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES:

Appearance: Solid tan pellets Odor: Mild, characteristic

EMERGENCY OVERVIEW: CAUTION. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, clothing, or eyes. Avoid breathing dust or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PRIMARY ROUTES OF EXPOSURE: Skin and eye, ingestion and inhalation.

MEDICAL CONDITIONS AGGRAVATED: Existing skin, eye and respiratory sensitivities.

4.FIRST AID MEASURES

FIRST AID						
IF SWALLOWED:	Call 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	Take off contaminated clothing.					
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.					
	Call a poison control center or doctor for treatment advice.					
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 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 further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.

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

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

FLAMMABLE LIMITS (LFL-UFL): N/A

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE-FIGHTING PROCEDURES: Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways. Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, hydrogen chloride, halogenated hydrocarbons, hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Take appropriate protective measures. Clear area. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions: Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup: Sweep spill up spill and place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Do not contaminate water, food, or feed by storage or disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING: Use only in a well-ventilated area. Minimize dust generation and accumulation.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original container in a cool, dry and well ventilated area. DO NOT store under wet conditions.

STORAGE TEMPERATURE (MIN/MAX): Do not store above 104°F (40°C).

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: Safety glasses or goggles.

MATERIAL SAFETY DATA SHEET Quali-Pro® Quinclorac 75 DF

Page 3 of 4

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

HAND PROTECTION: Chemical-resistant gloves such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber (each = 14 mils).

RESPIRATOR REQUIREMENTS: When handling in enclosed area where exposure limits may be exceeded, a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) may be worn.

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.

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 2. **ENGINEERING CONTROLS:** Refer to product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Solid tan pellets **ODOR**: mild, characteristic

pH: 4.08

BULK DENSITY: 0.5557 g/ml

VAPOR PRESSURE: < 1x 10⁻⁷ mmHg@20°C WATER SOLUBILITY(technical): 65 ppm

10. STABILITY AND REACTIVITY

STABILITY: Stable, however may decompose if heated.

CONDITIONS TO AVOID: Avoid exposure to high moisture conditions, extreme temperatures, and exposure to extreme heat for prolonged periods.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, hydrogen chloride, halogenated hydrocarbons, hydrocarbons. **HAZARDOUS POLYMERIZATION:** Product will not undergo polymerization.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute Oral LD50 (rat): >2,200 mg/kg
Acute Dermal LD50 (rat): >2,000 mg/kg
Acute Inhalation LC50 (rat): >6.1 mg/L (4-hr)
Eye Irritation (rabbit): Moderately irritating
Skin Irritation (rabbit): Slightly irritating
Dermal Sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Keep out of lakes, ponds and streams. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical where solids are permeable, particularly where the water table is shallow, may result in groundwater contamination.

MATERIAL SAFETY DATA SHEET Quali-Pro® Quinclorac 75 DF

Page 4 of 4

ENVIRONMENTAL TOXICITY (Technical):

96 hour LC₅₀, Rainbow trout: > 100 mg/L

96 hour LC₅₀, Bluegill: > 100 mg/L

48 hour EC₅₀, *Daphnia magna*: 29.8 mg/L Oral LD₅₀, Mallard duck: 2000 mg/kg

BEE TOXICITY: Non-toxic

13. DISPOSAL CONSIDERATIONS

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

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

DOT CLASSIFICATION:

Not Regulated.

INTERNATIONAL TRANSPORTATION:

IMO (vessel): Not Regulated. **IATA (air):** Not Regulated.

15. REGULATORY INFORMATION

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: Not applicable

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	HMIS		
HEALTH:	2	2	0	MINIMAL
FLAMMABILITY:	1	1	1	SLIGHT
REACTIVITY:	1	1	2	MODERATE
			3	HIGH
			4	SEVERE

MSDS DATE: 2-21-10. Supersedes version dated 8-18-09. Changes made to Sections 3, 4 and 12.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.