

**MATERIAL SAFETY DATA SHEET**

Phoenix Environmental Care, LLC  
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General Information No. 229-245-8845  
In Case of Emergency, Call  
PROSAR: 888-875-1724  
CHEMTREC: 800-424-9300

**I. PRODUCT IDENTIFICATION**

Product name: Rook 4L  
Active Ingredient: Quinclorac (40.0%)  
Chemical Name: 3, 7-dichloro-8-quinolinecarboxylic acid

**II. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS number	% by Wt.	OSHA PEL	ACGIH TLV
Quinclorac	84087-01-4	40.0	Not established	Not established

**III. HAZARDS IDENTIFICATION**

As defined by OSHA Hazard Communication Standard (29 CFR 1910.1200).

**EMERGENCY OVERVIEW**

*Keep out of reach of children.*

Caution. Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, clothing, or eyes. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material. Avoid breathing dust or spray mist.

**PHYSICAL OR CHEMICAL HAZARDS**

Can decompose at high temperatures forming toxic gases.

**ENVIRONMENTAL HAZARDS**

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

Keep out of lakes, ponds and streams. Do not apply directly to water, 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.

**IV. FIRST AID MEASURES**

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have affected person sip a glass of water if able to swallow. Do not induce vomiting unless told by a poison control center or doctor. Do not give anything by mouth to an unconscious person

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 in Eyes: Hold eyes 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 mouth to mouth if possible. Call a poison control center or doctor for further treatment advice.

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

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**V. FIRE FIGHTING MEASURES**

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Flash point (method): Does not flash.  
Flammable limits (LFL-UFL): LFL : Not applicable  
UFL: Not applicable  
Fire and Explosion Hazards: Organic solid dusts at sufficient concentrations can form explosive mixtures with air. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.  
Extinguishing Media: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.  
Fire Fighting Instructions: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off.  
Fire Fighting Equipment: Self-contained breathing apparatus with full facepiece. Full fire fighting turn-out gear (Bunker gear).  
Hazardous Combustion Products: Hydrogen chloride, oxides of nitrogen and carbon.

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**VI. ACCIDENTAL RELEASE MEASURES**

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Small Spill: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.  
Large Spill: 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. After removal, clean the area with detergent and water and neutralize with dilute alkaline solutions of soda ash or lime. Do not allow spill or clean up water to enter waterways.

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## VII. HANDLING AND STORAGE

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### KEEP OUT OF REACH OF CHILDREN!

Handling: Use only in a well-ventilated area. Minimize dust generation and accumulation.

Storage: Keep away from food, feed and drinking water. Store in a well ventilated, dry place away from heat and other sources of ignition.

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## VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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*Refer to Section III of this MSDS.*

**Engineering Controls:** When handlers use closed systems or enclosed cabs 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.

### Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below. For more options, refer to category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants,
2. Chemical-resistant gloves, such as butyl rubber >14 mils, or natural rubber > 14 mils, or neoprene rubber > 14 mils, or nitrile rubber > 14 mils,
3. Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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.

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## IX. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	Off-white viscous liquid
Odor:	No appreciable odor.
pH:	3.5
Bulk Density	1.12 g/mL
Vapor Pressure:	< 1 x 10 <sup>-7</sup> mmHg @ 20°C
Water Solubility:	(Technical) 65 ppm



Container: Completely empty contents into application equipment. Then dispose of packaging in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burning, stay out of smoke.

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

Returnable/Refillable Containers should be returned intact to point of purchase. Do not rinse container or empty remaining formulated product.

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**XIV. TRANSPORT INFORMATION**

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**DOT SHIPPING DESCRIPTION:** Not regulated by DOT  
**DOT HAZARD CLASS:** Not applicable  
**UN NUMBER:** Not applicable  
**DOT PACKING GROUP:** Not applicable  
**DOT PRIMARY/SECONDARY LABEL:** Not applicable  
**DOT PRIMARY/SECONDARY PLACARD:** Not applicable  
**DOT EMERGENCY RESPONSE GUIDE #:** Not applicable

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**XV. REGULATORY INFORMATION**

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**CERCLA REPORTABLE QUANTITY:** Not listed  
**SARA TITLE III STATUS:** 311/312 Hazard Categories - Immediate & Chronic Health Hazard  
313 Toxic Chemicals - None known  
**CALIFORNIA PROP 65:** Not listed

**XVI. OTHER INFORMATION**

**CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Phoenix Environmental Care, LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Phoenix Environmental Care, LLC and Seller harmless for any claims relating to such factors.

Phoenix Environmental Care, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Phoenix Environmental Care, LLC and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, Phoenix Environmental Care, LLC MAKES NEITHER WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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