

MATERIAL SAFETY DATA SHEET



1. PRODUCT NAME AND COMPANY IDENTIFIER

Product Name: CIRKIL® RTU
Product Use: Insecticide and Ovicide
EPA Registration No.: 88760-1
Company Name (Phone Number): Terramera, Inc. (1-800-597-9509)
Company Address: Buena Park Station, Buena Park, CA 90622-6449
Last Revision: Feb. 12, 2013

For more information on MSDS, please email msdsinfo@terramera.com.

2. HAZARDS IDENTIFICATION

Hazards Overview: CAUTION: May be harmful if swallowed. May cause mild eye irritation.
KEEP OUT OF REACH OF CHILDREN.

Routes of Entry: Eye Contact – May cause mild irritation.
Skin – No known hazard.
Ingestion – May be harmful if swallowed.
Inhalation – No known hazard.

Sensitization Skin sensitization is not expected.

Medical Conditions Aggravated by Overexposure: None

3. COMPOSITION/INGREDIENT INFORMATION

CAS Number	Content (w/w)	Chemical Name
8002-65-1	5.5 %	Cold Pressed Neem Oil
	94.5 %	Proprietary ingredients

All ingredients meet requirements of the US National Organic Program.

Hazardous Components: None. This product should pose no health concerns when used in accordance with the directions for use provided by the manufacturer.

4. FIRST-AID MEASURES

General Advice: Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 7:30 am to 3:30 pm Pacific Time (NPIC Web site: www.npic.orst.edu)

If swallowed: 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 by a poison control center or doctor. Do not give anything to an unconscious person.

If on skin:	Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
If in eyes:	First rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 15 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
If inhaled:	If symptoms of irritation or light-headedness occur, provide fresh air immediately and rest. If symptoms persist, seek medical advice.

5. FIRE-FIGHTING MEASURES

Flash Point:	Flammable (>54°F)
Suitable Extinguishing Media:	Alcohol-resistant foam, powder, carbon dioxide
Special Firefighting Procedures:	Do not use direct water jet on burning material. Keep containers cool by spraying with water if exposed to fire. Avoid vapor inhalation. Wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Steps for Spills	Ensure adequate ventilation. Collect spilled liquid in containers if possible for reuse or disposal. Transfer collected substance to properly labeled containers for reuse or disposal at an approved waste disposal facility. Absorb remaining liquid in paper, sand or inert absorbent.
Environmental Precautions:	Do not discharge into soil, drains, surface waters or groundwater.

7. HANDLING AND STORAGE

Handling:	Use the product strictly according to the directions for use provided by the manufacturer. Handle and open container with care. Avoid contact with eyes. Avoid inhalation of mists/vapors.
Storage:	For optimal performance, store at room temperature between 59°F (15°C) and 86°F (30°C). Avoid storing at temperatures above 104°F (40°C) or below 20°F (-7°C). Keep away from light and moisture. Keep containers tightly sealed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Eye Protection:	Safety glasses or goggles recommended.
Respiratory Protection:	Respiratory protection suitable for organic fumes and oils is recommended.
Skin Protection:	Protective gloves. Selection of gloves must be based on the user's assessment of the workplace hazards.
General Safety and Hygiene Measures:	Keep away from food and drink. Wash hands before breaks and at the end of work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Clear, non-viscous oily liquid (20°C)
Color:	Light yellow
Odor:	Mild fragrant odor
pH:	5.21 – 5.22
Specific Gravity:	0.826 – 0.827 g/ml (20°C)
Viscosity:	1.97 mPa*s
Boiling Point:	Not determined
Freezing Point:	Not determined
Solubility in Water:	Dispersible

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of use.
Incompatibility (Materials to Avoid):	Avoid oxidizing agents.
Conditions to Avoid:	Avoid light and moisture. Avoid low temperature. Avoid prolonged exposure to extreme heat. Avoid storage for longer than 12 hours if the product is mixed with water. Avoid electrostatic discharge.
Hazardous Reactions:	No hazardous reaction if stored and handled as indicated.
Hazardous Decomposition or By-products:	No hazardous decomposition by-products if stored and handled as indicated.
Thermal Decomposition:	Stable at ambient temperature. If product is heated above decomposition temperature, carbon monoxide may be released. Possible thermal decomposition products: Carbon monoxide, carbon dioxide, water.

11. TOXICOLOGICAL INFORMATION

Acute Oral:	LD50/rat/female: 3129 mg/kg
Acute Dermal:	LD50/rat/male & female > 5050 mg/kg
Acute Inhalation:	LD50 > 2.21 mg/L (4 h exposure; highest concentrate tested; no death)
Acute Eye Irritation:	Mildly irritating
Acute Skin Irritation:	Non-irritating
Sensitization:	Not a sensitizer

Non-acute information pertains to the active ingredient, cold pressed neem oil.

Reproductive Toxicity:	No adverse effect if used according to the directions for use provided by the manufacturer
Teratogenicity:	Not a known teratogen
Mutagenicity:	Negative in mutagenicity assays
Carcinogenicity:	NTP: Not listed IARC: Not listed

12. ECOLOGICAL INFORMATION

Information on: *Neem Oil*

Biodegradation:

Readily biodegradable in soil, water and on foliar surfaces.

Ecotoxicity:

No concern for ecological hazards. No concern for non-target organisms.

13. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility according to local, state and federal regulations. Do not contaminate water, food or feed by pesticide storage or disposal. Do not discharge into soil, drains, surface waters or groundwater. Open dumping is prohibited. Do not reuse container.

14. TRANSPORT INFORMATION

DOT/49CFR

Description of Goods: "Consumer Commodity" classed as ORM-D under 49 CFR 173.150
(when shipped by ground and each package does not exceed 66 pounds)

15. REGULATORY INFORMATION

The labeling requirements under federal pesticide law differ from the classification criteria and hazard information required for material safety data sheets (MSDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The proposed pesticide label being reviewed by the Environmental Protection Agency includes other important information, including directions for use.

CAUTION

Harmful if swallowed.

Causes moderate eye irritation.

16. ADDITIONAL INFORMATION

IMPORTANT: While the descriptions, data and information contained in this document are presented in good faith and believed to be accurate, it is provided for guidance only, and all statements or suggestions are made without any warranties, expressed or implied, of merchantability, of fitness for a particular purpose, or of the accuracy of the information. Attempts have been made to eliminate or draw attention to the risks associated with the use of this product; however, it is impossible to eliminate all risks inherently associated with the use, handling and transport of this product. Damage to products, materials, treated surfaces, ineffectiveness or other unintended consequences may result because of factors such as environmental conditions, the presence of other materials, the manner of use or application, the use of the product in a manner inconsistent with its labeling, or other unknown reasons, all of which are beyond the control of Terramera. All such risks shall be assumed by a user. Compliance with all applicable federal, state and local laws and regulations remains the responsibility of the user. This safety sheet cannot cover all possible situations that the user may experience. Each aspect of your operations should be examined to determine if additional precautions might be necessary. All health and safety information contained herein should be provided to your employees.