Circadian Sunrise Horticultural Oil - Safety Data Sheet

1: Identification

1.1 Product identifier

1.1.1 Trade Name: Circadian Sunrise Horticultural Oil

1.1.2 Use of the Substance / Preparation: Organic Fungicide / Insecticide / Miticide

1.1.3 Company / Undertaking Identification:

Circadian Crop Sciences LLC

PO Box 35

Davis, CA 95617

Tel: +1 530 231-5252 Fax: +1 530 231-5252

1.1.4 Emergency telephone:

Chemtrec: 800-424-9300

2: Hazard(s) Identification

2.1 The hazard classification

Eye Irritation Mild

Skin Irritation Non irritating. May cause allergic reaction.

- 2.2 Signal Word: Caution
- 2.3 Hazard statement(s): None
- 2.4 Pictograms:

NA

2.5 Precautionary statement(s):

Prevention—Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves, protective clothing, eye protection, skin protection.

IF ON SKIN—Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Ingredients are all FDA GRAS and approved for use in cosmetics and skin moisturizers.

IF IN EYES—Rinse with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get medical advice/attention if eye irritation persists. Product found non-irritating in the eyes of rabbits.

2.6 Hazards not otherwise classified (HNOC): None identified

3: Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	298-14-6	79.7
Corn oil	24634-61-5	8.0
Sodium lauryl sulfate	151-21-3	2.0
Kaolin clay	1318-93-0	4.0
Gum Arabic	9000-01-5	1.3
Potassium bicarbonate	298-14-6	3.6
Other inert ingredients		< 1% each

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4: First-Aid Measures

General Advice If symptoms persist, call a physician.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention

if irritation persists.

Skin Contact: Wash off immediately with plenty of water for at least 5 minutes.

Inhalation: Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration. **Ingestion:** Rinse mouth with water and drink plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects: None reasonably foreseeable.

Notes to Physician: Treat symptomatically

5: Fire-Fighting Measures

5. Fire-fighting Measures

This product will not sustain a fire after exposure to open flame.

5.1 Extinguishing Media

Water-spray, foam, CO2, dry powder

5.2 Special hazard arising from the substance or mixture

Carbon dioxide, carbon monoxide

5.3 Advice for firefighters

Spilled material is slippery.
Wear suitable protective clothing.

6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Forms slippery surfaces with water.

6.2 Environmental precautions

Do not discharge large amounts into drains or bodies of water

6.3 Methods and material for containment and clean-up

Use personal protective equipment as required. Pick up mechanically, and store in plastic bags or containers. May be spread over intended application sites at rates up to one pound per thousand square feet and actually benefit soil. Keep out of waterways. Waste is non-hazardous and should be accepted at most landfills. Consult local regulations.

Section 7: Handling and Storage

7.1 Handling Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

7.2 Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

- **8.1. Engineering Controls:** Safety shower and eye bath. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations below threshold limit value of common dust.
- **8.2. Respiratory protection:** NIOSH/MSHA or European Standard EN 149 approved respirator when breathing spray mist is unavoidable.
- 8.3 Eye Protection: Protective eyeglasses or chemical safety goggles
- **8.4 Skin Protection:** Wear long sleeved pants and shirt, socks, closed toed shoes and chemical resistant gloves to minimize skin contact.

Section 9: Physical and Chemical Properties

Physical State: Liquid suspension

Appearance: Chocolate Brown 7.5YR 4/2

Odor: Moderate / corn

Odor Threshold: No information available

Specific Gravity: 1.0 gm/ml

pH: 8.5 to 9.0

Melting Point/Range: Not applicable

Boiling Point/Range: No information available

All Phase Safety Data Sheet

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Flash Point: No information available Evaporation Rate: No information available

Flammability (solid,gas): No information available

Flammability or explosive limits
Upper: No data available
Lower: No data available

Heavy Metals

Lead < 3 ppm Arsenic < 1 ppm Chromium < 4 ppm Copper < 5 ppm Mercury < 0.03 ppm

Solubility Highly soluble in water

Section 10: Stability and Reactivity

- 4.1. Chemical Stability: Stable under normal temperatures and pressures
- 4.2. Shelf Life: 24 months period
- 4.3. Hazardous decomposition: Carbon oxides (CO, CO2)
- 4.4. Hazardous polymerization: Will not occur
- 4.5. Incompatible with: Not available

Section 11: Toxicological Information

Acute toxicity: Not available. All ingredients are generally recognized as safe by the United States Food and Drug

Administration.

Skin corrosion/irritation: Not available.

Serious eye damage/eye irritation: Not available. Respiratory of skin sensitization: Not available

Germ cell mutagenicity: Not available Carcinogenicity: Not available Reproductive toxicity: Not available

Specific target organ toxicity – single exposure: Not available **Specific target organ toxicity** – repeated exposure: Not available

Section 12: Ecological Information

12.1 Toxicity

European Honeybee (Apis mellifera ligustica)

Method: OCSPP 850.3020

Acute contact LD50 > 1936 μ g/bee proportion or mortality (\hat{p}) =0.0 99% confidence interval on \hat{p} is (0.00, 0.19) 95% confidence interval on \hat{p} is (0.00, 0.14)

Dietary Toxicity Upland Game Species—Coturnix quail (Coturnix coturnix)

Method: OCSPP 850.2200 LC50 > 26,888 mg/kg proportion or mortality $(\hat{p}) = 0.0$ 99% confidence interval on \hat{p} is (0.00, 0.41)95% confidence interval on \hat{p} is (0.00, 0.31)

Dietary Toxicity Wetland Game Species— Mallard (Anas platyrhynchos)

Method: OCSPP 850.2200 LC50 > 26,888 mg/kg proportion or mortality $(\hat{p}) = 0.0$ 99% confidence interval on \hat{p} is (0.00, 0.41)95% confidence interval on \hat{p} is (0.00, 0.31) All Phase Safety Data Sheet

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Avian Acute Toxicity Passerine Species—Zebra Finch (Taeniopygia guttata)

Method: OCSPP 850.2100

LD50 > 5,556 mg/kg

proportion or mortality (\hat{p}) =0.0

99% confidence interval on \hat{p} is (0.00, 0.41) 95% confidence interval on \hat{p} is (0.00, 0.31)

Avian Acute Toxicity Upland Game Species—Coturnix quail (Coturnix coturnix)

Method: OCSPP 850.2100

LD50 > 10,000 mg/kg

proportion or mortality (\hat{p}) =0.0

99% confidence interval on \hat{p} is (0.00, 0.41) 95% confidence interval on \hat{p} is (0.00, 0.31)

Mammalian Acute Toxicity—Sprague Dawley Rats

Method: OECD No. 423 LD50>2,000 mg/kg

Acute Ocular Irritation/Corrosiveness—New Zealand White Rabbits

Method: OECD No. 405

Non-irritating/non-corrosive after a single dose administration

Section 13: Disposal Considerations

No special disposal concerns. Contains essential plant nutrients and wetting agents that can benefit soils. Rates up to three ounces of product per thousand square feet of land are considered safe for the environment.

Section 14: Transport Information

No special transportation concerns

Section 15: Regulatory Information

Product must be used in accordance with the label accompanying it

Section 16: Other Information

Prepared By: Regulatory Affairs

Circadian Crop Sciences LLC

Date of Creation of this SDS: 05/13/2019

Last revised: 05/13/2019

Employer Responsibilities

Employers must ensure that the SDSs are readily accessible to employees for all hazardous chemicals in their workplace. This may be done in many ways. For example, employers may keep the SDSs in a binder or on computers as long as the employees have immediate access to the information without leaving their work area when needed and a back-up is available for rapid access to the SDS in the case of a power outage or other emergency. Furthermore, employers may want to designate a person(s) responsible for obtaining and maintaining the SDSs. If the employer does not have an SDS, the employer or designated person(s) should contact the manufacturer to obtain one.