



SAFETY DATA SHEET

Brand Name(s): Cielo[®], Cielo[®] ULV, Nebula[®] ULV

Effective Date: 10 July 2024

v.14

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SECTION 1. Identification of the Substance/Mixture and of the Company

Product Identifier

Formulation Identifier: Cielo[®], Cielo[®] ULV, Nebula[®] ULV

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses: An Insecticide for Ultra-Low Volume Application for Adult Mosquito Control

Uses Advised Against: This product is not registered for use or sale as an insecticide in the United States of America

Details of the Supplier of the Safety Data Sheet

Clarke Mosquito Control Products, Inc.

675 Sidwell Court

St. Charles, IL 60174 U.S.A.

+1 (630) 894-2000

Email: Clarke@clarke.com

Emergency Telephone Number

24-Hour Medical Emergency (inside the U.S.A.): POISON CONTROL Toll-free (800) 214 – 7753

24-Hour Transportation Emergency (inside the U.S.A.): INFOTRAC (800) 535-5053

Outside the U.S.A. contact local emergency poison control

Contact Clarke +1 (630) 894 - 2000 during business hours (1:00 p.m. – 10:00 p.m. UTC/GMT)

SECTION 2. Hazards Identification

Globally Harmonized System of Classification and Labeling of Chemicals (GHS) (Rev. 10; 2023)

Classification of the Substance or Mixture

Serious Eye Damage/Eye Irritation	Category 2B	H320
Hazardous to the aquatic environment, short-term (Acute) hazard	Category 1	H400
Hazardous to the aquatic environment, long-term (Chronic) hazard	Category 1	H410

Hazard Symbol:



Signal Word:

Warning

Hazard Statements:

H320 Causes eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

IF IN EYES:

P264 +P265 Wash Hands thoroughly after handling. Do not touch eyes.

P305+ P351+338 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+ P317 If eye irritation persists: Get medical help.



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P273 Avoid release to the environment (except as intended in use).

P391 Collect spillage.

P501 Dispose of contents and container in accordance with local/regional/national regulations.

Other Hazards Not Classifiable Under GHS: None known

SECTION 3. Composition/Information on Ingredients

Components

Substance Name	CAS #	Concentration % w/w
Prallethrin	23031-36-9	0.75
Imidacloprid	138261-41-3	3.00
Propylene carbonate	108-32-7	<40*
L-Carvone	6486-40-1	<10*

*The exact percentage (concentration) of composition has been withheld as trade secret.

All hazardous components in the formulation are disclosed in Section 3.

Aquatic Hazard - (Acute) Cat 1; Chronic) Cat 1 SECTION 4. First Aid Measures

Description of First Aid Measures

General Advice:	If symptoms develop or persist, or for treatment advice, call a poison control center or doctor.
If in Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present and if easy to do, after the first 5 minutes then continue rinsing. 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 15-20 minutes.
If Swallowed:	Call a poison control center or doctor if you feel unwell. DO NOT give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person.
If Inhaled:	Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask, etc.).

Most Important Symptoms and Effects, Both Acute and Delayed.

See sections 2.1 and 11.1.

Recommendations for Immediate Medical Care and Special Treatment

No specific treatment. Treat symptomatically.

SECTION 5. Fire-Fighting Measures

Extinguishing Media

Suitable Extinguishing Media: Carbon Dioxide (CO₂), Dry Chemical, Foam

Unsuitable Extinguishing Media: Water jet



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Special Hazards Arising from the Substance or Mixture

Specific Hazards: Under fire conditions some components may decompose. Combustion products may include CO and NO_x.

Special Protective Equipment and Precautions for Fire-Fighters

Protection Against Fire: Wear positive pressure, self-contained breathing apparatus and protective firefighting clothing (includes fire-fighting helmet, coat, pants, boots, and gloves).

Special Procedures: Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

SECTION 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

General Precautions: Use appropriate protection (see section 8)

Environmental Precautions: This product is highly toxic to aquatic organisms, including fish and aquatic invertebrates. Prevent product from entering into drains and waterways. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Collect and dispose of this material and its container in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. See Section 12 for additional ecological information.

Methods and Material for Containment and Cleaning Up

Clean Up Methods: Soak up with absorbent, non-combustible material, such as sand, silica gel, clay, or sawdust, while using appropriate personal protection equipment. Collect material in appropriate container for disposal.

SECTION 7. Handling and Storage

Precautions for Safe Handling

Handling: Keep out of reach of children. Do not take internally. Avoid contact with skin and eyes. Avoid inhalation of vapors from product.

Hygiene Measures: Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove soiled clothing immediately and clean thoroughly before using again.

Conditions for Safe Storage, Including Any Incompatibilities

Storage: Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store above 129°F (54°C). Avoid storage at temperatures exceeding 100°F (38°C) for extended periods. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilizers. Keep out of reach of children.

SECTION 8. Exposure Controls / Personal Protection

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.



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Control Parameters

Component Name	List/Source	Type	Value
Propylene carbonate	US WEEL	TWA aerosol	10mg/m ³

Exposure Controls

Engineering Controls: Use with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Wash hands thoroughly after handling. Wash clothing before re-using.

Individual Protection Measures, such as Personal Protection Equipment

Special Note: Maintain and inspect Personal Protective Equipment before use. Discard and replace damaged protective equipment. Polycarbonate and nitrile may show degradation after prolonged exposure to this product. Promptly remove and clean PPE.

Eye Protection: Safety Glasses and Face Shield, or Goggles when mixing/loading/using under pressure.

Skin Protection: Wear suitable protective clothing including long-sleeve shirt, long pants, shoes and socks.

Hand Protection: It is good industrial hygiene practice to minimize skin contact. Use suitable protective chemical resistant gloves such nitrile, latex, neoprene, or butyl-rubber. Promptly clean reusable gloves, if worn, and inspect for signs of damage, swelling, cracking, or brittleness.

Respiratory Protection: None

SECTION 9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance:	Liquid
Color:	Amber (Gardner 1 – 3)
Odor:	Slight mint
Odor Threshold:	Not Available
pH:	7.3 to 7.7
Melting Point:	Not Applicable
Freezing Point:	Not Determined
Initial Boiling Point:	Not Determined
Flash Point:	> 117°C
Evaporation Rate:	Not Determined
Flammability:	Not Classified
Explosion limits [U/L]:	Not Applicable
Vapor Pressure:	Not Determined
Vapor Density:	Not Determined
Density:	1.138 g/mL
Solubility:	Not Determined
Partition Coefficient:	Not Determined
Auto-Ignition Temperature:	Not Determined
Viscosity:	41.84 cp at 20°C; 20.98 cp at 40°C
Decomposition Temperature:	Not Available
Explosive Properties:	Not Available
Oxidizing Properties:	Not Available



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SECTION 10. Stability and Reactivity

Reactivity: Not Available
Chemical Stability: Stable under normal conditions. Reacts with aluminum, iron and bronze.

Possibility of Hazardous Reactions

Hazardous Reactions: Not known to occur
Hazardous Polymerization: Not known to occur
Conditions to Avoid: Protect from direct sunlight, extreme heat, sparks, open flame. Keep away from moisture.
Incompatible Materials: Incompatible with water and oxidizers. Keep separate from aqueous solutions and oxidizers. Avoid contact with strong acids, strong bases
Hazardous Decomposition Products: None known under normal conditions of storage and use

SECTION 11. Toxicological Information

Information on Likely Routes of Exposure

Inhalation: Inhalation of vapors or mists may be irritating to the respiratory tract or toxic
Eye Contact: Minimally irritating without long lasting effect
Ingestion: May be irritating to mouth, throat, or stomach
Skin Contact: Slightly irritating without lasting effects

Information on Toxicological Effects

Acute Toxicity/Effects

Oral, Rat LD₅₀ > 2000 mg/kg bw
Dermal, Rat LD₅₀ > 2000 mg/kg bw
Inhalation, Rat LC₅₀ (4 hr) > 5.15 mg/L
Skin Corrosion/Irritation: Slightly irritating
Serious Eye Damage/Irritation: Mildly irritating
Skin Sensitization: Not a sensitizer
STOT – Single Exposure: No data is available

Chronic Toxicity/Effects

Germ Cell Mutagenicity: No data is available
Carcinogenicity: No data is available for this product.
Reproductive Effects: No data is available
STOT – Repeated Exposure: No data is available

SECTION 12. Ecological Information

Ecotoxicity

Toxicity to Fish: Toxic to fish (Rainbow Trout, OECD 203)
96-hr LC₅₀ = 17.25 µg a.i./L; NOEC = 6.25 µg a.i./L
Toxicity to Aquatic Invertebrates: Highly toxic to aquatic invertebrates (*Daphnia magna*, OECD 202)
48-hr EC₅₀ = 3.9 µg a.i./L; NOEC = 2.5 µg a.i./L
Toxicity to Birds: Estimated LD₅₀ > 2000 mg/kg BW
Toxicity to Pollinators: Highly toxic to honeybees on direct contact
96 hr LD₅₀ 0.01µg ai/bee, NOEC 0.0075µg ai/bee



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SECTION 13. Disposal Considerations

Waste Treatment and Disposal Methods

Container Disposal: Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of container in a sanitary landfill, or by other procedures approved by State and Local authorities.

SECTION 14. Transport Information

DOT (US)

Not regulated

IMDG (Vessel)

UN Number: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Prallethrin, Imidacloprid)

Hazard Class: 9

Packing Group: III

Marine Pollutant: Yes

ICAO/IATA (Air Transport)

UN Number: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Prallethrin, Imidacloprid)

Hazard Class: 9

Packing Group: III

Marine Pollutant: Yes

Note: If a material is in a single package or a combination packaging containing inner packaging with contents of **5 liters or less** for liquids, the package does not need to be marked with the EHS mark (pictogram).

SECTION 15. Regulatory Information

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the United States OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Precautionary Statements, Personal Protective Equipment (PPE), User Safety Requirements, User Safety Recommendations and Engineering Controls: Refer to the product label.

SARA TITLE III CLASSIFICATION

Section 302: None

Section 311/312: Immediate (acute) hazard

Section 313: None

SECTION 16. Other Information

DISCLAIMER OF LIABILITY: The information in this SDS was obtained from sources we believe to be reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared as is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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