SAFETY DATA SHEET

**01. IDENTIFICATION**

NAME OF PREPARATION OR SUBSTANCE: Citronella Oil - Organic

CAS #: 8000-29-1

SUPPLIER NAME: Jedwards International, Inc.

SUPPLIER ADDRESS: 141 Campanelli Drive

Braintree, MA 02184 USA

TELEPHONE NUMBER: (617)472-9300

RECOMMENDED USE: For manufacturing and repackaging use only

EMERGENCY TELEPHONE NUMBER: Chemtrec 1-800-424-9300 (24 hrs)

**02. HAZARD IDENTIFICATION**

NAME OF COMPOUND PERCENTAGE R- PHRASES

CITRAL <1.1% R-36, 43

GERANIOL <23% R-36, 43

CITRONELLOL <8.5% R-45

LIMONENE <12% R-36, 43

LINALOOL <1% Not classified

   **Xi+N**

R-37/38: Irritating to repertory system and skin.

R-41: Risk of serious damage to eyes.

R-43: May cause sensitization by skin contact.

R-63: Possible risk of harm to the unborn child.

S-02: Keep out of reach of children.

S-23: Do not breathe vapor.

S-26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S-36/37/39: Wear suitable clothing, gloves and eye/face protection.

S-45: In case of accident, or if you feel unwell seek medical advice immediately.

CLASSIFICATION ACCORDING TO REGULATION EC NO 1272/2008

 May cause mild health effects

 Very toxic to aquatic life

 Harmful in contact with skin and eye

• Combustible Liquid (Flash Point 90.56˚C)

• Hazardous in cases of skin contact irritants, and eye contact irritants.

• Acute oral toxicity (LD50): >7200mg/kg Rat.

• Acute dermal toxicity (LD50): >4700mg/kg Rabbit.

• Environmental mishandling that can contaminate with soil, ground, and surface water.

**03. COMPOSITION/INFORMATION ON INGREDIENTS**

MAJOR CHEMICAL:

GERANIOL: 18% - 24%

CITRONELLOL: 5% - 9%

GERANYL ACETATE: 1% - 5%

LIMONENE: 7% - 11%

**04. FIRST AID MEASURES**

EYE CONTACT: Flush immediately with water for at least 15 min. Get medical treatment.

SKIN CONTACT: Wash thoroughly with soap and water.

INHALATION: Remove from exposure site to fresh air, if unable to access fresh air, artificial air should be given or consult a doctor.

INGESTION: Rinse mouth with water and consult a doctor.

**05. FIRE FIGHTING MEASURES**

FLAMMABILITY OF PRODUCT: Medium combustibility in room temperature.

FLASH POINT: 90.56˚C

PRODUCT OF COMBUSTION: In open area carbon dioxide and water. Under limit factor may produce carbon monoxide.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam. Do not use direct water jet on burning materials.

SPECIAL PROTECTIVE ACTION

FOR FIRE FIGHTERS: Try to keep container walls cool with water spray.

**06. ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTION: First remove ignition source.

CONTACT WITH SKIN, EYES AND INHALATION: Use protective equipment for eyes, nose, mouth and hands.

ENVIRONMENTAL PRECAUTIONS: Do not allow to drain into surface, ground water, and soil.

METHOD AND MATERIAL FOR

CONTAINMENT AND CLEANUP: Provide adequate ventilation to avoid excess inhalation of vapor. Spillage should be cleaned immediately by use of sand or inert powder and kept without contaminating the environment.

**07. HANDLING & STORAGE**

HANDLING: Apply good manufacturing and industrial hygiene practices. Use proper equipment. Do not eat or drink while handling.

STORAGE: Store in a cool dry and ventilated area away from heat sources, protected from light, and under a nitrogen surface.

FIRE PROTECTION: Keep away from ignition source and flame.

**08. EXPOSURE CONTROLS/PERSONAL PROTECTION**

CONTROL PARAMETER: Keep in cool condition. Higher moisture level of skin means less permeable.

APPROPRIATE ENGINEERING: Provide exhaust ventilation and other engineering control to keep the air borne concentration of weeper below their respective threshold value limit. Ensure that eye wash stations and safety showers are proximal to the work station location.

INDIVIDUAL PROTECTION: Personal protective equipment.

General protective and hygienic measures.

Do not eat, drink, smoke, or sniff while working. Keep away from food stuffs, beverages, and feed. Immediately remove all soiled and contaminated clothing. Wash hands before break and at the end of work and avoid contact with eyes and skin.

RESPIRATORY PROTECTION: Use suitable respiratory device only when vapors are generated.

PROTECTION OF HANDS: Protective gloves.



The glove material has to be impermeable and resistant to the product. Due to missing test no recommendation to the glove material can be given for

the product. Select glove material with consideration of penetration time, rate of the diffusion, and degradation.

EYE PROTECTION:



Tightly sealed goggles.

BODY PROTECTION:



Protective work clothing.

**09. PHYSICAL & CHEMICAL PROPERTIES**

APPEARANCE: Yellow to golden brown.

ODOR: Specific Citronella

ODOR THRESHOLD: Not available

PH: Not applicable

MELTING POINTS/FREEZING POINTS: Not available

INITIAL BOILING POINT AND BOIL RANGE: 200°C

FLASH POINT: 90.56°C

EVAPORATION RATE: Not available

UPPER FLAMMABILITY OR EXPLOSIVE LIMIT: Not available

VAPOR PRESSURE (liquid/sub cooled): 31.1 Pa (0.0289 mm Hg)

VAPOR DENSITY: Not available

SPECIFIC GRAVITY: 0.8900-0.9100

SOLUBILITY: Insoluble in cool water, hot water, ethanol

PARTITION COEFFICIENT: N/OCTANOL/WATER: Not available

AUTO/IGNITION: Not available

DECOMPOSITION TEMPERATURE: Not available

VISCOSITY: Not available

**10. STABILITY AND REACTIVITY DATA**

REACTIVITY: Presents no significant reactivity hazard by itself or in contact with water.

CHEMICAL STABILITY: The product is stable.

POSSIBILITY OF HAZARDED REACTION: Oxidizing agent, acid alkali, light and air conditions to avoid under nitrogen surface.

INCOMPATIBLE MATERIAL: Polythene.

HAZARDOUS DECOMPOSITION PRODUCT: Carbon monoxide may be performing during combustion.

**11. TOXICOLOGICAL INFORMATION**

INFORMATION ON THE LIKELY ROUTES OF EXPOSURE:

INHALATION: Cooling system is not functioning properly during processing.

SKIN: Low moisture content on the skin.

INGESTION: Hands are not properly washed before and after processing.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL

AND TOXICOLOGICAL CHARACTERISTICS: Irritating to the eyes, may sensitize by skin contact.

DELAYED, IMMEDIATE, AND CHRONIC EFFECT

FROM SHORT TERM AND LONG TERM EXPOSURE:

IMMEDIATE EFFECT: Burning sensitization.

DELAYED EFFECT: Not available.

NUMERICAL MEASURES OF TOXICITY:

ACUTE ORAL TOXICITY (LD50): >7200mg/kg rat

ACUTE DERMAL TOXICITY (LD50): >4600mg/kg rabbit

**12. ECOLOGICAL INFORMATION**

ECOTOXICITY:

AQUATIC TOXICITY: Quantitative data on the ecological effects of this product are not available.

REMARKS: Do not allow to enter water, waste water, or soil. Toxic to aquatic organisms.

PERSISTENCE AND DEGRADABILITY: Sensitivity to air, light, oxidizing agent, acid and alkali, however long term degradation of product may arise.

BIO ACCUMULATIVE PRETENTION: This product is unlikely to accumulate in the environment.

MOBILITY IN SOIL: Some little portion dissolves in the water and moves.

OTHER ADVERSE EFFECTS: Not Available.

**13. DISPOSAL C** **ONSIDERATIONS**

Waste must be disposed according to local regulation, avoid disposing in to the environment.

**14. TRANSPORT INFORMATION**

UN NUMBER: 3082

CLASS NUMBER: 9

PACKING GROUP: III

PROPER SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.

**15. REGULATORY INFORMATION**

HAZARD SYMBOL:

XI: Irritating to the eye.

RISK PHRASES:

R-37/38: Irritating to respiratory system and skin.

R-41: Risk of serious damage to eyes.

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SAFETY PHRASES:

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S-45: In case of accident or if you feel unwell seek medical advice immediately.

**16. OTHER INFORMATION**

• The shelf life of this product is 36 months from date of manufacture.

• Use caution and only in small quantities.

• Will irritate skin.

Essential oils must be diluted prior to use. It is the sole responsibility of the user to determine the method and amount of dilution required for safe use, which may vary depending on the nature of the intended use. Keep away from children and pregnant women.

**Revised on 5/4/2020**

The information provided above is intended only as a guide to the appropriate precautionary handling of the material by properly trained personnel using this product. It is the responsibility of the customer and user to ensure it has in place provisions for the safe and proper handling of the material. Although Jedwards International, Inc. believes the above information to be accurate based on the information available to Jedwards, it is the responsibility of the customer and user of the material to perform its own investigation and due diligence prior to use to verify that the product purchased from Jedwards meets their quality requirements and is appropriate for the use to which the product is to be put. Use and purchase of this material is subject to Jedwards International, Inc. standard terms and conditions, which supersede any conflicting terms contained on Buyer’s purchase order or any document or instrument supplied by Buyer.