SAFETY DATA SHEET

24 Hour Emergency Telephone No. (Chemtrec) 1-800-424-9300
The emergency number should be used only in the event of an emergency involving a spill, leak, fire, exposure or accident with hazardous materials.

I. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Lime Cold Press Oil Product Code: BP4610, BP4615
Manufacturer Name: Rio Grande Juice Company
Manufacturer Address: 702 E. Interstate Hwy 2
Mission, TX 78572
Manufacturer Phone: 956 598 6800 Manufacturer Fax: 956 598 6801

II. HAZARDS IDENTIFICATION

OSHA Hazards
Combustible Liquid, Target Organ Effect, Skin sensitizer, Irritant

Target Organ: Kidney

GHS Classification
Flammable liquids (Category 3)
Acute toxicity, Oral (Category 5)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Skin sensitization (Category 1)
Acute aquatic toxicity (Category 1)
Aquatic Chronic toxicity (Category 3)

GHS Label elements, including precautionary statements.

Signal word: Danger
Hazard statement(s)
H226: Flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.
Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/ hot surfaces. – no smoking.
P233 Keep container tightly closed.
P241 Use explosion-proof electrical/ventilating/lighting/.../equipment
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280 Wear protective gloves.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor

P331: Do NOT induce vomiting.
P302+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P306+P362 IF ON CLOTHING: Take off contaminated clothing and wash before reuse.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to an approved waste disposal plant.

HMIS Classification:

HEALTH	1
FIRE	3
PHYSICAL	0

NFPA Rating:

HEALTH	1
FIRE	3
REACTIVITY	0

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation.
Ingestion May be harmful if swallowed.

III. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Citrus Peel Oil, CPO, Terpene Hydrocarbons
Formula : $C_{10}H_{16}$
Molecular Weight : 136.23 g/mol

Name	Concentration (Range)	CAS #	EC #
d-Limonene	90-100%	5989-27-5	227-813-5

IV. FIRST AID MEASURES

General advice:
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled:
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact:
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact:
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

V. FIREFIGHTING MEASURES

Conditions of flammability
Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media
Use dry chemical or carbon dioxide.
Special protective equipment for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Further information

Use water spray to cool unopened containers.

VI. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

VII. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines

Citrus Terpenes 8h TWA=30ppm (AIHA Standard)

TWA = Time Weighted Average

Personal protection.

When handily the substance personal must use the protective equipment below:


Safety gloves


Tight safety goggles


Protective clothing


Respirator mask

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

XI. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Liquid
Color	Defined green-dark green.
Odor	Citrus aroma

Safety Data

Boiling point °C	182.00 °C
Flash point (closed cup) °F	118°F/46°C
Specific gravity/relative density	0.86 – 0.88 @ 20° C
Refractive index	1.47 – 1.49 @ 20° C

Solubility

Water	Insoluble
Alcohol	Soluble
Viscosity	N/A
Flammability	Flammable

X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
To prevent oxidation, prevent long term exposure to air. If storing in a partially filled container, fill headspace with an inert gas such as nitrogen.
Conditions to avoid.
Heat, flames, and sparks.
Materials to avoid.
Strong oxidizing agents
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available

XI. TOXICOLOGICAL INFORMATION

Acute Effects
Citrus terpenes have been shown to have low oral toxicity (LD_{50}>5 g/kg) and low dermal toxicity (LD_{50}> 5g/kg) when tested on rabbits. Citrus terpenes also showed low toxicity by inhalation (RD_{50}>1 g/kg) when tested on mice. The skin irritancy of limonene in guinea pigs and rabbits is considered moderate and low, respectively. Inhalation may cause irritation of the nose, throat, and respiratory tract.
Chronic Effects
This product is not classified as a carcinogen by OSHA, IARC, ACGIH or NTP. This product has not been shown to produce genetic changes when tested on bacterial or animal cells. This product does not contain known reproductive or developmental toxins. Prolonged or repeated exposure can cause drying or dermatitis of skin. Improper storage and handling may lead to the formation of a possible skin sensitizer.

XII. ECOLOGICAL INFORMATION

Ecotoxicity:
There is no information available currently for this product. However, a spill may produce significant toxicity to aquatic organisms and ecosystems. Some studies have shown that certain bacteria and fungi have the ability to degrade terpenes, decreasing their toxicity to fish. When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water.

Persistence/Degradability:

Product is expected to be readily biodegradable.

Bioaccumulation/Accumulation:
No appreciable bioconcentration is expected in the environment.

Mobility in Environment:
Citrus terpenes volatilize rapidly.

Endocrine Disruptive Properties
No data available

XIII. DISPOSAL CONSIDERATIONS

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1169 Class: 3 Packing group: III
Proper shipping name: EXTRACTS, AROMATIC, LIQUID
Marine pollutant: Marine pollutant: Dipentene
Poison Inhalation Hazard: No
ERG No: 127

IMDG
UN number: 1169 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: EXTRACTS, AROMATIC, LIQUID
Marine pollutant: Marine pollutant: Dipentene

IATA
UN number: 1169 Class: 3 Packing group: III
Proper shipping name: EXTRACTS, AROMATIC, LIQUID

XV. REGULATORY INFORMATION

The United States FDA lists Lime cold pressed oil in 21 CFR sections 182.20 and 182.6.

Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986
This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

SARA Title III (Section 313)
This substance contains no materials subject to the reporting requirements of SARA Title III (Section 313).

EU regulations:
The product has been classified and labelled according to criteria provided in Directive 67/548/EEC and 1272/2008/EC and following the recommendations of EFFA (European Flavor and Fragrance Association).

In accordance with German water hazard class (WGK) regulation Annex 1 of AwSV we self-classify this product as WGK 3.

XVI. Other Information

Revised 04.17.2024

No health hazards data exists for daily occupational exposure to this mixture. When used at recommended levels in flavor applications, this mixture has been determined to be generally recognized as safe (GRAS) in safety review by the Flavor and Extract Manufacturer's Association of the United States (FEMA) under the authority of section 201(s) of the Federal Food, Drug and Cosmetic Act.