

Material Safety Data Sheet

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Limonene

INCI Name: Limonene

Chemical Name: D-Limonene / (+)-Limonene

CAS No.: 5989-27-5

EC No.: 227-813-5

Molecular Formula: C₁₀H₁₆

Molecular Weight: 136.24 g/mol

Product Type: Aroma Chemical / Terpene

Origin: India

Supplier: Botanic Planet Canada Inc.

Address: 2 Bram Crt Unit # 3-4 Brampton, Ontario, Canada

Telephone number: 905-455-4444

Emergency phone number (613)-996-6666 CANUTEC 24 HOUR EMERGENCY

SECTION 2 – HAZARD IDENTIFICATION

GHS Classification

Skin Irritation – Category 2

Serious Eye Damage – Category 1

Skin Sensitization – Category 1

Signal Word

DANGER



H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.

H318 – Causes serious eye damage.

Precautionary Statements

P261 – Avoid breathing mist/vapours/spray.

P264 – Wash thoroughly after handling.

P272 – Contaminated work clothing should not be allowed out of the workplace.

P280 – Wear protective gloves/eye protection/face protection.

P302+P352 – IF ON SKIN: Wash with plenty of water.

P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 – Immediately call a POISON CENTRE/doctor

3. Composition / Information on Ingredients

Ingredient	CAS No.	EC No.	Concentration
D-Limonene	5989-27-5	227-813-5	≥95%*

4. First-Aid Measures

Inhalation: Move person to fresh air and keep comfortable for breathing. Seek medical attention if symptoms persist.

Skin Contact: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation or rash develops, obtain medical attention.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical advice if irritation persists.

Ingestion: Do not induce vomiting. Immediately contact a poison centre or physician because of aspiration hazard.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO₂), alcohol-resistant foam or water fog.

Unsuitable Media: Avoid direct high-pressure water jets.

Specific Hazards: Flammable liquid and vapor. Vapors may form an ignitable mixture with air. Combustion may produce carbon monoxide and carbon dioxide.

Firefighters should use appropriate protective equipment and self-contained breathing apparatus when necessary.

6. Accidental Release Measures

Remove ignition sources. Ensure adequate ventilation. Avoid breathing vapors and avoid skin contact.

Prevent material from entering drains, sewers, soil and waterways.

Absorb spills using sand, earth, vermiculite or another non-combustible absorbent material. Transfer to an appropriate container for disposal.

7. Handling and Storage

Handling: Keep away from heat, sparks, open flames and hot surfaces. No smoking. Avoid breathing vapors. Avoid contact with skin and eyes. Use adequate ventilation.

Storage: Store in a cool, dry, well-ventilated location. Keep container tightly closed. Protect from direct sunlight, excessive heat and air exposure.

Limonene can oxidize during prolonged exposure to air, and oxidation products may increase its skin-sensitization potential.

8. Exposure Controls / Personal Protection

Engineering Controls: Provide adequate general or local exhaust ventilation.

Eye Protection: Chemical safety glasses or goggles.

Hand Protection: Chemical-resistant protective gloves.

Skin Protection: Suitable protective clothing.

Respiratory Protection: Appropriate organic-vapor respiratory protection may be required where ventilation is inadequate.

Wash hands thoroughly after handling.

9. Physical and Chemical Properties

Property	Information
Physical State	Liquid
Appearance	Clear, colorless to pale yellow
Odor	Characteristic sweet orange/citrus
Molecular Formula	C ₁₀ H ₁₆
Molecular Weight	136.24 g/mol
Specific Gravity @ 20°C	Approx. 0.84

Property	Information
Refractive Index @ 20°C	Approx. 1.47
Boiling Point	Approx. 175–177°C
Flash Point	Approx. 48°C*
Water Solubility	Practically insoluble
Solubility	Soluble in alcohol and oils
Vapor Pressure	Low to moderate
Auto-Ignition Temperature	Approx. 255°C*

10. Stability and Reactivity

Stability: Stable under recommended storage conditions.

Conditions to Avoid: Heat, sparks, flames, sunlight and prolonged exposure to air.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide may form during combustion.

Hazardous Polymerization: Not expected under normal conditions.

11. Toxicological Information

Likely Routes of Exposure: Inhalation, ingestion, skin and eye contact.

Skin: Causes irritation and may cause allergic skin reaction.

Eyes: Contact may cause irritation.

Inhalation: High vapor concentrations may cause respiratory irritation, headache or discomfort.

Ingestion: Aspiration into the lungs following ingestion or vomiting can cause serious lung injury and may be fatal.

12. Ecological Information

Limonene is considered hazardous to the aquatic environment.

Aquatic Toxicity: Very toxic to aquatic life.

Long-Term Effects: Very toxic to aquatic life with long-lasting effects.

Avoid uncontrolled release into drains, soil, surface water or groundwater.

13. Disposal Considerations

Dispose of contents and containers in accordance with applicable municipal, provincial and federal regulations.

Do not discharge into drains, waterways or the environment.

14. Transport Information

D-Limonene may be regulated for transportation depending on mode, quantity and jurisdiction.

UN Number: UN2052

Proper Shipping Name: DIPENTENE

Hazard Class: 3 – Flammable Liquid

Packing Group: III

Transport classification and any marine pollutant/environmental designation should be confirmed against the exact supplier SDS and shipment configuration before shipping.

15. Regulatory Information

This SDS is intended as general safety information for the raw material. Users are responsible for compliance with applicable Canadian WHMIS/TDG, cosmetic, environmental and workplace requirements. Limonene is also a recognized fragrance allergen in various cosmetic regulatory systems. Finished-product labeling requirements depend on concentration, product type and market.

16. Other Information

Product: Limonene

CAS: 5989-27-5

This product is a 100% pure and natural. It does not contain any artificial ingredients or adulteration of any kind to the best of our knowledge and specifications. The analysis and statements herein constitute the most complete information available to Botanic Planet Canada Inc. Please refer to all relevant technical information specific to the product, prior to use. This information contained in this material safety Data sheet is obtained from current and reliable sources. As an ordinary or otherwise user(s) of this product is outside the control of Botanic Planet Canada Inc., no representation or warranty, expressed or implied is made as to the effect(s) of such use (s) (including damages or injury) or any obtained. Botanic Planet Canada Inc. expressly disclaims responsibility as to the ordinary or otherwise uses. Furthermore, Botanic Planet Canada Inc. makes no claims as to the fitness for any use, and you should consider nothing contained herein as a recommendation. The Liability of botanic Planet Canada Inc. is limited to the value of the goods and does not include any consequential loss. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario Canada.

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