



Section 1 • Chemical Product and Company Identification

Product Name: **UltraPrep™** Product Code: ULP
 Product Description: Ultra-High Purity d-Limonene Cleaning Agent

Company:

T2 Laboratories Inc
 1830 Clarkson Street
 Jacksonville, FL 32202-1006 USA
 Phone 904-632-2172
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 Web www.t2labs.com

Emergency Telephone Numbers:

24 hrs Chem-Tel 800-255-3924
 24 hrs 813-979-0626 (collect)
 T2 Labs Main 904-632-2172
 T2 Labs Mobile 904-631-1715
 Local Emergency 904-396-3258

Section 2 • Composition and Information on Hazardous Ingredients

Component	CAS No.	Weight%	OSHA HCS Hazard(s)
d-limonene	5989-27-5	99-100	Combustible Liquid. Skin and eye irritant. No ACGIH TLV or OSHA PELs established.

EC Classifications:

- Xi - Irritant.
- R36 - Irritating to eyes.
- R38 - Irritating to skin.
- S24 - Avoid contact with skin.
- S25 - Avoid contact with eyes.

Section 3 • Hazards Identification

Emergency Overview:

Appearance: Clear liquid, colorless to light amber.
 Odor: Citrus.
 Risk Summary: Irritating to eyes and skin. No known chronic indications. This substance is combustible and will sustain combustion at temperatures above its flashpoint. Avoid heat, sparks and open flame.

Potential Health Effects:

Inhalation: Vapors are not hazardous, but may be irritating in confined spaces.
 Eyes: Irritating to eyes.
 Skin: Irritating to skin.
 Ingestion: Will be irritating to tissues. May be harmful or fatal if swallowed in sufficient quantity. See Section 11 (Toxicological information) for further information.
 Chronic: Not considered a carcinogen by NTP, IARC, or OSHA. No known chronic indications.

Environmental Hazards:

Marine Pollutant. See Section 12 (Ecological Information) for further information.

Section 4 • First Aid Measures

Inhalation: Seek fresh air immediately. If breathing is difficult, get medical attention.

Eyes: Flush with water for at least 15 minutes. If irritation develops, get medical attention.

Skin: Remove contaminated clothing. Wash affected areas with soap and water. If irritation develops, get medical attention.

Ingestion: Drink lots of water to dilute substance. Get medical attention.

Section 5 • Fire Fighting Procedures

Flammable Properties: Flashpoint 49°C (120°F) TCC. Vapors can explode and liquids can combust when temperatures reach or exceed the flashpoint.

Extinguishing Media: Carbon dioxide, dry chemical, foam.

Fire Fighting Instructions:
Use CO₂, foam or dry chemical. Use water as a spray only to lower temperature (this substance floats on water). Treat as an oil fire.

Section 6 • Accidental Release Measures

Personal Precautions: See Section 8, Personal Protection.

Environmental Precautions: Do not discharge into surface waters. May be toxic to aquatic organisms. See Section 3 (Environmental Hazards) and Section 12 (Ecological Information) for further information.

Containment and Cleanup Techniques:
Exercise caution as hard floors coated with this material may be slippery. Small spills may be absorbed by sand or oil-absorbing materials. Large spills should be collected by pumping into closed containers for recovery or disposal. Spills over water will float and may be collected by oil absorbants or by skimming.

Section 7 • Handling and Storage

Handling: Wear chemical safety glasses, gloves, goggles, and apron.

Storage: Store in tightly closed metal or glass containers. Do not store in plastic. Avoid heat, sparks, and open flames.

Section 8 • Exposure Controls, Personal Protection

Engineering Controls: Mechanical ventilation may be necessary at elevated temperatures to control odor.

Exposure Guidelines: No OSHA TLV or PEL established. The company recommends 100 ppm based on data for other compounds in the same chemical family.

Respiratory Protection: Respirator is not required. Organic vapor cartridge may be used for odor elimination.

Skin Protection: Wear chemically resistant rubber gloves and apron (viton, nitrile, and or PVC) to minimize exposure.

Eye Protection: Wear chemical safety glasses, goggles, or face shield to prevent eye contact.

Section 9 • Physical and Chemical Properties

Appearance: Clear liquid, colorless to light amber.

Odor: Characteristic citrus odor.

Physical State: Liquid.

pH: Not water soluble (no pH).

Vapor Pressure: 1.5 mmHg at 25°C.

Vapor Density: 4.7 (air = 1.0)

Boiling Point: 176°C (349°F).

Flashpoint: 49°C (120°F) TCC

Freezing Point: <-20°C (<-4°F)

Solubility in water: nil.

Specific Gravity: 0.8449 @ 25°C

VOC Content: 845 g/l @ 25°C

Molecular Weight: 136.24

Chemical Formula: C10H16

Section 10 • Stability and Reactivity

Conditions to Avoid: Excessive temperatures and/or contact with air may cause decomposition or oxidation.
Materials to Avoid: Avoid contact with strong acids, strong bases, and oxidizing agents.
Decomposition Products: Ultimate decomposition products are CO2 and water.

Section 11 • Toxicological Information

Target Organs: Eyes and skin.
Routes of Entry: Eye and skin contact.
Acute Toxicity: Oral rat LD50 > 5000 mg/kg (RTECS).
Chronic Toxicity: No known chronic indications.

Section 12 • Ecological Information

Biodegradability: Not determined. Related chemicals are known to be biodegradable.
Aquatic Toxicity: Contains d-limonene which is an aquatic toxicant. However, this substance is immiscible with water, is known to evaporate quickly and biodegrade and should not cause long-term effects.
Environmental Fate: Not Determined. Related chemicals are known to be non-persistent in the environment.
Bioaccumulation Potential: Not Determined. Related chemicals are known to be non-accumulating in the environment.

Section 13 • Disposal Considerations

RCRA Hazardous Waste: Classified as a RCRA Hazardous waste (flammability characteristic).
Disposal Methods: Dispose of this material by incineration or recovery at a government-approved disposal facility.

Section 14 • Transport Information

DOT:
Proper Shipping Name: Terpene hydrocarbons, n.o.s., 3, UN2319, PG III
Exceptions: Chemicals, n.o.i. (Not Regulated) - allowable for shipment in non-bulk containers.
IMO: Not Regulated.
IATA: Not Regulated.

Section 15 • Regulatory Information

TSCA (USA): Listed.
EINECS (EC): Listed (273-309-3).
DSL (Canada): Listed.
AICS (Australia): Listed.
MITI (Japan): Listed.
KECL (South Korea): Listed.

Section 16 • Other Information

Emergency Contact: M-F 8-5pm Eastern US Time 1-904-632-2172
Toll Free 24 hours US Chem-Tel 1-800-255-3924
International 24 hours collect Chem-Tel 1-813-979-0626

Hazard Ratings

HMIS: Health = 2 Flammability = 2 Reactivity = 1 Personal Protection = C
NFPA: Health = 0 Flammability = 2 Reactivity = 0
(0 = minimal, 1 = slight, 2 = moderate, 3 = serious, 4 = severe)

To the best of our knowledge this information is accurate and current as of the date printed below. It is provided in good faith without warranty to assist in the proper handling and storage of this product. This information may change when the material is used in combination with any other materials or in any process. T2 Labs assumes no liability for the accuracy or completeness of the information contained herein. Final determination as to the safety and suitability of this material is the sole responsibility of the user, as is the responsibility to comply with all applicable federal, state, and local regulations related to the transport, storage, use, or disposal of this and any other chemical product.
