



Section 1 • Chemical Product and Company Identification

Product Name: **AlphaSolv™ Limonene HF** (Product Code: LHF)
 Synonyms: limonene, high flash limonene
 Description: High Flash Terpene Solvent

Company:
 T2 Laboratories Inc
 1830 Clarkson Street
 Jacksonville, FL 32202-1006 USA
 Phone 904-632-2172
 Fax 904-632-2182
 Email info@t2labs.com
 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	10-50	Combustible Liquid. Skin and eye irritant. No ACGIH TLV or OSHA PELs established.
CycloSolv™	proprietary mixture NJTSRN T2L-5001	50-90	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 63°C (145°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: Not determined.

Boiling Point: 192 - 204°C (378 - 400°F).

Flashpoint: 63°C (145°F) TCC

Freezing Point: Not determined

Solubility in water: nil.

Specific Gravity: 0.8521 @ 25°C

VOC Content: 852 g/l. @ 25°C

Molecular Weight: mixture.

Chemical Formula: mixture.

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: Not determined.

Chronic Toxicity: No known chronic indications.

Section 12 • Ecological Information

Biodegradability: Not determined

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

Bioaccumulation Potential: Not Determined

Section 13 • Disposal Considerations

RCRA Hazardous Waste: Not classified as a RCRA Hazardous waste.

Disposal Methods: Dispose of this material by incineration or recovery at a government-approved disposal facility.

Section 14 • Transport Information

DOT:

Bulk: Combustible Liquid, n.o.s. (petroleum distillates), 3, NA1993, PG III

Non-Bulk: Chemicals, n.o.i. (Not Regulated).

IMO: Not Regulated.

IATA: Not Regulated.

Section 15 • Regulatory Information

TSCA (USA): Listed

EINECS (EC): Unknown.

DSL (Canada): Unknown.

AICS (Australia): Unknown.

MITI (Japan): Unknown.

KECL (South Korea): Unknown.

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)

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