

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Trade name: D-Limonene

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Industrial or Commercial Use only.

Uses advised against: All other uses.

1.3 Details of the supplier of the Safety Data Sheet

USA Lab Inc.
12400 Belden Ct., Livonia,
MI 48150,
USA

Hazard emergency contact: Chemtrec 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Flammable liquid, category 3

Skin irritation, category 2

Skin sensitization, category 1

Eye irritation, category 2

Aquatic toxicity (acute), category 1

Aquatic toxicity (chronic), category 1

2.2 Label elements

Labelling according to OSHA Hazardous Communication Standard 29 CFR 1910.1200:



Signal word:

Danger

Hazard statements:

H226

Highly flammable liquid and vapor.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H400

Very toxic to aquatic life

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep/Store away from clothing/combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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 CENTER/doctor.

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture meeting the criteria for classification in accordance with OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Ingredients:

Name	CAS No.	GHS classification	% (w/v)
Citrus sinensis; Orange Terpenes	68647-72-3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H19 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	>99

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- Following inhalation:** If respiratory symptoms develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing.
- Following skin contact:** Wash affected area with soap and water. Seek medical treatment as necessary.
- Following eye contact:** Flush immediately with water for at least 15 minutes. Seek medical treatment as necessary.
- Following ingestion:** Seek medical treatment as necessary.
- Protection of first aider:** Not applicable.

4.2 Most important symptoms and effects

Symptoms: Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, headaches, nausea and signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue). Prolonged or repeated contact may dry skin and cause irritation

Risks: Untreated symptoms may result in additional health risks.

4.3 Indication of any immediate medical and special treatment

The physician may contact the national poison center for advice.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon Dioxide, Foam, Chemical.

Unsuitable extinguishing media: No data available.

5.2 Specific hazards arising from mixture

Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion.

5.3 Advice for fire fighters

Special protective equipment for firefighters:

Vapors may be irritating to eyes and respiratory tract.

5.4 Other information

No other information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid eye contact. Follow good manufacturing practices.

6.2 Environmental Precaution

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways.

6.3 Methods and material for containment and cleaning up

Spills should be cleaned up immediately using suitable absorbent material and properly disposed of in accordance with current applicable laws and regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers.

Incompatible materials: See section 10.

7.3 Specific end uses

See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

No data available.

8.2 Exposure controls

Engineering controls:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Personal Protective equipment:

Hand: None generally required.

Body protection: None generally required.

Eye: Safety glasses.

Respiratory: None generally required.

Other measures: No statement available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color:	Clear
Odor:	Orange
Odor threshold:	No data available
pH:	No data available
Melting point/range:	No data available
Boiling point/range:	No data available
Flash point:	115°F
Evaporation rate:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available

Relative Density:	No data available
Solubility(ies):	No data available
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not chemically reactive.

10.2 Chemical stability

Stable under normal ambient and anticipated conditions of use.

10.3 Possibility of hazardous reactions

Hazardous reactions not anticipated.

10.4 Conditions to avoid

Keep away from ignition source.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents and strong reducing agents.

10.6 Hazardous decomposition products

Carbon monoxides is a product of incomplete combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

General information:

This product does not contain known human carcinogens.

11.1 Information on toxicological effects

Acute Toxicity:

No statements available for any of the ingredients.

Skin corrosion/irritation:

Causes skin irritation.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitization:

May cause an allergic skin reaction.

Germ cell mutagenicity:

No statements available for any of the ingredients.

Carcinogenicity:

This product does not contain known human carcinogens.

Reproductive toxicity:

No statements available for any of the ingredients.

STOT – single exposure:

No statements available for any of the ingredients.

STOT – repeated exposure:

No statements available for any of the ingredients.

Aspiration hazard:

No statements available for any of the ingredients.

Likely route(s) of exposure:

Skin exposure and eye exposure are the most likely to occur. Accidental ingestion is also possible.

SECTION 12: ECOLOGICAL INFORMATION

General information:

No statements available for any of the ingredients

12.1 Toxicity

No statements available for any of the ingredients.

12.2 Persistence and degradability

Physical- and photochemical elimination:

No statements available for any of the ingredients.

Biodegradation:

No statements available for any of the ingredients.

12.3 Bioaccumulative potential

No statements available for any of the ingredients.

12.4 Mobility in soil

Known/Predicted environmental distribution:

No statements available for any of the ingredients.

Surface tension:

No statements available for any of the ingredients.

Adsorption/Desorption:

No statements available for any of the ingredients.

12.5 Results of PBT and vPvB assessment

This product does not contain components which are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No statements available for any of the ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Waste material:

Dispose according to Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID/IDMG/IATA: UN 2319

14.2 UN proper shipping name

ADR/RID/IDMG/IATA: Terpene Hydrocarbons, N.O.S. (D-Limonene)

14.3 Transport hazard class(es)

ADR/RID/IDMG/IATA: 3

14.4 Packing group

ADR/RID/IDMG/IATA: III

14.5 Environmental hazards

ADR/RID/IDMG/IATA: Non-regulated

14.6 Special precautions for user

No statements available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable, as product is not shipped in bulk.

SECTION 15: REGULATORY INFORMATION

International Inventories

TSCA: Complies

DSL: No components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.

US Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard: Yes
Chronic Health Hazard: No
Fire hazard: Yes
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada

WHMIS Hazard Class

Not determined.

SECTION 16: OTHER INFORMATION

Further information

The information presented in this Safety Data Sheet (SDS) is accurate to the best of our knowledge at the date of publication. The information given within the SDS is meant solely as a guide for safe handling, use, transportation, processing, storage, release and disposal. In no means can the information within the SDS be considered as a warranty or specification for quality.