



MATERIAL SAFETY DATA SHEET

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1-613-996-6666 – CANUTEC – Transportation Emergency
1-888-243-9771 – ChExSS – Chemical Exposure

D'LIMONENE

SECTION I: IDENTIFICATION OF PRODUCT

Product Name: D'LIMONENE
Chemical Family: None known
WHMIS Classification: B3 / D2B
Workplace Hazard: Combustible Liquid/skin irritant,
skin sensitizer

Product Use: Citrus based anti-accretion product
TDG Classification: 3
Packaging Group: III
PIN: UN2319

SECTION II: HAZARDOUS INGREDIENTS

Ingredients	Percent	CAS Number	LD ₅₀ (Oral/Rat)	LC ₅₀ (Species/Route)
Citrus Turpenes	100	94266-47-4	>5000 mg/kg	Not determined

SECTION III: TOXICOLOGICAL PROPERTIES

Route of entry: Skin Eye Contact Inhalation Ingestion

Effects of acute exposure: May cause mild irritation, redness and tearing to the eyes. Moderate skin irritant. Low toxicity if swallowed. May cause gastrointestinal irritation. May cause irritation of the upper respiratory tract resulting in sneezing and coughing.

Effects of chronic exposure: Prolonged or repeated exposure may cause dermatitis.

Exposure limits: Not available

Irritancy of product: May irritate eyes. May can cause moderate skin irritation

Sensitization to product: D-Limonene has tested positive as a skin sensitizer in animal testing.

Carcinogenicity: Not classified by OSHA, IARC, ACGIH or NTP

REPRODUCTIVE TOXICITY: Does not contain known reproductive or developmental toxins.

TERATOGENICITY: No information available

MUTAGENICITY: This product has not been shown to produce genetic changes when tested on bacterial or animal cells.

Name of toxicological synergistic products: No information available



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SECTION IV: FIRST AID MEASURES

Skin Contact: Remove contaminated clothing and wash contacted area thoroughly with soap and water. If irritation persists, obtain medical attention.

Eye Contact: Flush with gently flowing warm water for 15 minutes, or until irritation subsides, holding eyelids open. If irritation persists obtain medical attention

Inhalation: Move to fresh air. Apply oxygen or artificial respiration if required. If breathing difficulties, or distress, continue obtain medical attention.

Ingestion: Do not induce vomiting. If symptoms develop or large quantity is swallowed, obtain medical attention.

SECTION V: PHYSICAL DATA

Physical state: Liquid

Appearance and odour: Colorless to pale yellow liquid; sharp citrus odour

Odour threshold: Not applicable

Specific gravity (°C): 0.84 at 20°C

Vapor pressure (mmHG): Not applicable

Vapor density (Air=1): Not available

Evaporation rate: 0.2 (butyl acetate = 1)

Boiling point (°C): 176

Freeze/Melting point (°C): -96

pH (%): Not available

Co-efficient of water/oil distribution: Insoluble in water



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SECTION VI: FIRE AND EXPLOSION DATA

Conditions of Flammability: Can form explosive mixtures at temperatures above flash point. Vapours are heavier than air, and may travel to a source of ignition and flash back.

Means Of Extinguishing: Carbon dioxide, dry chemical, water spray or foam.

Flash point: >45°C (CCC)

Upper flammable limit: 6.1%

Lower flammable limit: 0.71%

Auto-ignition temperature: Not available

Hazardous combustion products: Not available

Explosion data-sensitivity to mechanical impact: Not available

Explosion data-sensitivity to static discharge: Not available

SECTION VII: REACTIVITY DATA

Chemically unstable (conditions): Stable.

Product incompatible with: Avoid contact with strong oxidizers agents and strong acids.

Conditions of reactivity: None known.

Hazardous Decomposition Products: Oxides of citrus terpenes, which can result from improper storage and handling, are know to cause skin sensitization



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SECTION VIII: PREVENTATIVE MEASURES

Personal Protective Equipment: In the absence of adequate ventilation, use an approved respirator with a combination dust/mist/organic vapour cartridges or SCBA. Rubber or plastic protective gloves recommended. Recommend chemical splash goggles. Wear clothing adequate to protect against exposure

Specific Engineering Controls: use local exhaust ventilation, process enclosure or other engineering controls to maintain concentration of mists or vapours in air below TLV. Ensure explosion proof equipment is used if material is heated.. Ensure eyewash station and emergency shower are available

Procedures For Leak/Spills: Use appropriate safety equipment. Eliminate ignition sources. Stop leak if possible to do so without risk. Dike to prevent spread of material. Collect large spills by vacuum truck for disposal. Soak up residual and small spills with absorbent material. Collect in approved containers for disposal. Wash spill area thoroughly with soap and water.

Waste disposal: Dispose in accordance with federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. Dispose of empty containers in accordance with local regulations.

Handling procedures and equipment: Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep containers tightly closed when not in use. Launder contaminated clothing before reuse.

Storage requirements: Store in a dry area away from incompatibles and ignition sources. Ground and bond containers during transfers. Empty containers **contain residual hazardous material; store and handle as if full.**

Special shipping information: TDG Proper shipping name TERPENE HYDROCARBONS N.O.S.

SECTION IX: PREPARATION

Date updated: September 11, 2009

Prepared by: Product Safety Committee

All the recommendations and suggestions herein concerning this product are based upon tests and data believed to be reliable, however it is the user's responsibility to determine the safety, toxicity and sustainability for their own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Q'Max Solutions Inc. as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does Q'Max Solutions Inc. assume any liability arising out of use by others. Nor is the information herein to be considered as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.