

Material Safety Data Sheet

Product: D-Limonene

Emergency Telephone:

Transportation: 800-424-9300

Health (L A Poison Control): 800-356-3129

Product Identification

Product Name	DOT Shipping Name	DOT Hazard Classification
Di-Limonene	Non-Regulated Material	N/A

Component Ingredients

Ingredient	CAS#	TLV	Units	AGENC	TYP	RQ
Di-Limonene	5989-27-5	N/E				

Contains the following chemicals subject to the reporting requirements of section 313 of SARA Title III:

Ingredient Name	Percent
NONE	

Physical Data

BP	VP	Flashpoint	EvapRate	SG	LbsVOCperGallon
310	2.00	115	0.30	0.84	6.98

All temperature measurements are in Fahrenheit

Vapor Pressure: mm Mercury @ 68F

Evaporation Rate: n-Butyl Acetate=1

N/E = Not Established N/A=Not Applicable

Emergency First Aid

- Eye contact:** If irritation or redness from exposure to vapors develops, move victim from exposure and into fresh air. For direct contact, flush eyes with clean water. Seek medical help.
- Skin contact:** Remove contaminated clothing. Cleanse affected areas by washing with mild soap and water. If irritation persists, seek medical attention.
- Inhalation:** Move victim into fresh air. If symptoms of exposure develop, seek medical attention. If victim is not breathing, artificial respiration should be administered. Seek immediate medical attention.
- Ingestion:** **Seek Immediate Medical Attention** Have physician call Los Angeles Poison Information Center (24 hrs.) (800) 356-3129

Health Hazards/Routes of Entry

- Eye contact:** May cause eye irritation. Direct contact may cause burning, tearing and redness.
- Skin contact:** May cause skin irritation. Prolonged and repeated exposure may cause redness and burning, drying and cracking of the skin and dermatitis. Product may be absorbed through the skin. Persons with pre-existing skin disorder may be more susceptible to the effects of this material.
- Inhalation:** Exposure to vapors or mist may cause: Irritation of the nose and throat, signs of nervous system depression, irregular heartbeats. Persons with impaired lung function or asthma-like conditions may experience breathing difficulties.
- Ingestion:** Ingestion of excessive quantities may cause: Irritation of the digestive tract, signs of nervous systems depression. Aspiration Hazard - this material can enter lungs and damage during swallowing or vomiting and cause lung inflammation
- Comments:**

Special Protection Information

- Ventilation:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see section I), additional ventilation may be required. Where explosive mixtures may be present, systems safe for such locations should be used.

- Respiratory Protection: Respiratory protection is advised when concentrations exceed the established exposure limits (see Hazardous Ingredients). Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges (NIOSH approved) or supplied air equipment.
- Protective Gloves: prevent Gloves impermeable to the specific material handled are advised to prevent skin contact, possible irritation and absorption.
- Eye Protection: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.
- Other Protective Equipment: It is suggested that an NIOSH approved eyewash be available in work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Reactivity Data

- Stability: Stable
- Incompatibility (Materials to Avoid): This product is incompatible with strong acids or bases, oxidizing agents and selected amines.
- Hazardous Decomposition Products: Thermal decomposition in the presence of air may yield carbon monoxide and/or carbon dioxide.
- Hazardous Polymerization: Will Not Occur.

Spill Or Leak Procedure

Highway or Railway Spills
Call CHEMTREC (800) 424-9300 Cont. U.S.
(Collect) (202) 483-7616 From Alaska & Hawaii

Precautions in Case of Spill

Stay up wind and away from spill. Keep all sources of ignition and hot metal surfaces away from spill. If spill is indoors, ventilate area of spill. Foam, especially high expansion foam, may be used to suppress vapors. Keep out of drains, sewers or waterways. Use sand or other inert material to dam and contain spill. Do not flush area with water. For small spills, do not flush with water; use absorbent pads. Call spill response team if large spill. Notify appropriate State/Local agencies. If spill in excess of EPA reportable quantity, immediately notify the National Response Center (800-424-8802).

Waste Disposal Method

Dispose of product in accordance with local, county, state, and federal regulations.

Handling and Storage Precautions

Keep containers tightly closed. Keep containers cool, dry and away from source of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with product. Use good personal hygiene practice. Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, solder, braze, drill, grind or expose containers to heat, flame, sparks, or other source of ignition: They may explode.

Fire and Explosion Information

- Extinguishing Media:** Dry chemicals, CO₂, or foam. Water may be ineffective and spread fire.
- Hazardous Decomposition:** May form toxic materials: carbon dioxide and carbon monoxide, various hydrocarbons, etc.
- Fire Fighting Procedures:** Wear self-contained breathing apparatus with full face piece operated in pressure-demand or other positive pressure mode.

NFPA Hazard Ranking

Health	Fire	Reactivity
1	2	0

0=Least 1=Slight 2=Moderate 3=High 4=Extreme

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The information in this document is believed to be correct as of the date issued. **However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is implied regarding the accuracy or completeness of this information, the results to be obtained from use of this information or the product, the safety of this product, or the hazards related to its use.** This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

MSDS Revision Date
4/17/09