



Comet Chemical Company Ltd.
3463 Thomas Street Innisfil ,ON L9S 3W4
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Material Safety Data Sheet

D-LIMONENE

Revision Date: 2008/05/20

Section 1 : PRODUCT AND COMPANY IDENTIFICATION

Chemical family: Mixture.

Product uses: Solvent, degreaser, fragrance & flavoring.

Product name: D-Limonene

Supplier: Comet Chemical Ltd.
3463 Thomas Street
Innisfil, On.
L9S 3W4.

Supplier 24 hour phone number: (705)436-5580 – weekdays from 8:00-5:00.
(800)567-7455 all other times (Newalta Services).

Section 2 : INGREDIENT INFORMATION

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
5989-27-5	95-97	D-LIMONENE	NOT AVAILABLE	4400 MG/KG RAT ORAL 5600 MG/KG MOUSE ORAL >5000 MG/KG RABBIT DERMAL	NOT AVAILABLE

Section 2A: ADDITIONAL INGREDIENT INFORMATION

Note: (supplier).
CAS# 5989-27-5: LD50 5000 mg/kg rabbit dermal.

Section 3 : HAZARD IDENTIFICATION

Route of entry: Eye contact, skin contact, skin absorption, inhalation and ingestion.

Effects of acute exposure

Eye contact: May cause irritation.

Skin contact: May cause irritation for sensitive individuals.

Skin absorption: No adverse effects are expected with normal use.

Inhalation: High vapor concentrations may be irritating to the nose, throat and upper respiratory tract.

Ingestion: May cause nausea and diarrhea.
Aspiration into the lungs may cause lung damage.

Effects of chronic exposure: May cause kidney damage.
Prolonged or repeated overexposure may cause drying and cracking of the skin (dermatitis).

Sensitization to product: No

Carcinogenic effects: Not listed as a carcinogen.

Reproductive effects: Effects have been reported in animals.

Teratogenicity: Not available.

Mutagenicity: Not available.

Synergistic materials: Not available.

Section 4 : FIRST AID MEASURES

Skin contact: Wash thoroughly with soap and water.
Remove contaminated clothing.
Consult a physician if irritation persists.

Eye contact: Flush eyes with clear, running water for 15 minutes while holding eyelids open. If irritation persists, consult a physician.

Inhalation: Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.

Ingestion: Obtain immediate medical attention.
Do not induce vomiting, keep person warm, quiet.
Guard against aspiration of liquids into lungs.
If vomiting occurs, keep head below hips.
If conscious, give several glasses of water.
Never give anything by mouth to an unconscious person.

Section 5 : FIRE FIGHTING MEASURES

Flammability: Combustible.

Conditions of flammability: Heat, sparks and open flames.

Extinguishing media: Dry chemical.
Foam
Water fog.
Do not use water jet.

Special procedures: Firefighters should wear adequate protective gear.
Self-contained breathing apparatus required.
Use water spray to cool fire exposed containers.

Auto-ignition temperature (°C): 237°C

Flash point (°C), method: 46–48°C

Lower flammability limit (% vol): 0.7%

Upper flammability limit (% vol): 6.1%

Explosion Data

- Sensitivity to static discharge:** Not expected.
- Sensitivity to mechanical impact:** Not sensitive.
- Hazardous combustion products:** Carbon monoxide (CO).
Smoke
Nitrogen oxides (NO_x).
Partially oxidized hydrocarbons.
- Rate of burning:** Not available.
- Explosive power:** Not available.

Section 6 : ACCIDENTAL RELEASE MEASURES

- Leak/Spill:** Eliminate all sources of ignition.
Dike area to prevent spreading.
Ventilate area.
Wear appropriate protective equipment.
Ground handling equipment.
Use non-sparking tools.
Explosion proof motors are recommended.
Soak up with inert absorbent.
Pump to containers or soak up on inert absorbent.
Place in a closed container for disposal.
Do not flush to sewer.
Blanket spill with foam to protect against accidental ignition.

Section 7 : HANDLING AND STORAGE

- Handling procedures and equipment:** Keep away from heat, sparks, and open flame.
Avoid breathing vapors/mists.
Use adequate ventilation.
Wear personal protective equipment appropriate to task.
Use proper grounding procedures.
Avoid contact with skin, eyes and clothing.
Do not cut, grind, weld or drill on or near containers.
Launder contaminated clothing prior to reuse.
Do not ingest.
- Storage requirements:** Store away from all sources of ignition.
Store away from incompatible materials.
Store in a cool, dry and well ventilated area.

Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary Measures

Gloves/Type:



Nitrile or viton.
Barricade gloves.

Respiratory/Type: None required under normal use.
If TLV is exceeded.



NIOSH approved organic vapors.

Eye/Type:



Safety glasses with side-shields.



Chemical safety goggles.

Footwear/Type:



Impervious boots.

Clothing/Type: Long sleeve shirt, long trousers.



Impervious apron.
When splashing is possible.

Other/Type: Eye wash facility should be in close proximity.
Emergency shower should be in close proximity.

Ventilation requirements: As needed to stay below TLV.

Exposure limit of material: Not available for mixture, see the ingredients section.

Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Appearance & odor: Pale yellow.
Clear
Strong odour.
Orange odour.

Odor threshold (ppm): Not available.

Vapour pressure (mmHg): < 5 @ 20°C

Vapour density (air=1): 4.7

Volatiles (%)

By volume: Not available.

**Evaporation rate
(butyl acetate = 1):** Not available.

Boiling point (°C): 176°C

Freezing point (°C): -74°C

pH: Not available.

Specific gravity @ 20 °C: 0.844

Solubility in water (%): Slight.
(also soluble in alcohols).
(soluble in ethers).
(soluble in hydrocarbons).
(not soluble in glycols).

Coefficient of water\oil dist.: Not available.

VOC: Not available.

Section 10 : STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Conditions of instability: None known.

Hazardous polymerization: Will not occur.

Incompatible substances: Strong oxidizing agents.

Hazardous decomposition products: See hazardous combustion products.

Section 11 : TOXICOLOGICAL INFORMATION

LD50 of product, species & route: 4400 mg/kg rat oral.
5000 mg/kg rabbit dermal.
5600 mg/kg mouse oral.

LC50 of product, species & route: Not available for mixture, see section 2A.

Section 12 : ECOLOGICAL INFORMATION

Environmental toxicity: No data at this time.

Environmental fate: No data at this time.

Section 13 : DISPOSAL CONSIDERATIONS

Waste disposal: In accordance with municipal, provincial and federal regulations.
May be incinerated.

Section 14 : TRANSPORT INFORMATION

TDG classification: EXTRACTS, FLAVOURING, LIQUID
UN1197
CLASS 3
PG III.

Special shipping information: See transportation information.

Section 15 : REGULATORY INFORMATION

WHMIS classification:

B3, D2B.



DSL status: Appears on DSL.

Section 16 : OTHER INFORMATION

Supplier MSDS date: 2008/05/20

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