

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: LANG DENTAL MFG. CO., INC.
175 MESSNER DRIVE
WHEELING, IL 60090
USA

TELEPHONE: PRODUCT INFORMATION: (800) 222-5264 or (847) 215-6622

EMERGENCY CONTACT: INFOTRAC 24 HOURS CHEMICAL RESPONSE SYSTEM
(800) 535-5053 or (352) 323-3500

CHEMICAL NAME: ORANGE TERPENES

PRODUCT: EL COR SOLVENT

PRODUCT NUMBERS: 0404, 0406

2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT (S):	CAS NUMBER:	%:	HAZARD SYMBOL:	R PHRASES:
D-limonene	5989-27-5	< 69	Xi; N	10/38-43-50/53
Mineral Oil		< 30	n/a	n/a
Lanolin		< 1	n/a	n/a

3. HAZARDS IDENTIFICATION

Combustible.

Potential Health Effects: See Section 11 for more information.

PRIMARY ROUTES OF ENTRY: Eye contact, skin contact, inhalation.

Causes moderate to severe eye irritation. May cause skin slight redness. Prolonged or repeated exposure may cause drying of the skin. May cause nose, throat, and respiratory tract irritation, coughing, headache. Not likely to be toxic, but may cause vomiting, headache, or other medical problems.

Medical Conditions Aggravated By Exposure: May irritate the skin of people with pre-existing skin conditions.

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, ACGIH or NTP.

OSHA Regulatory Status: This material is combustible, which is defined as having a flash point between 100°F (37.8°C) and 200°F (93.3°C). Combustible materials are hazardous according to the OSHA Hazard Communications Standard (29 CFR 1910.1200).

4. FIRST AID MEASURES

Eyes: Remove contact lenses. Flush with water for at least 15 minutes. See a physician if irritation persists.

Skin: Remove contaminated clothing. Wash affected areas with soap and water. See a physician if irritation persists.

Inhalation: Remove person to a ventilated area. See a physician if breathing difficulty persists.

Ingestion: Seek medical attention immediately. DO NOT induce vomiting. Rinse mouth with water. DO NOT administer anything by mouth to unconscious person. DO NOT leave victim unattended.

General: As with any chemical, employees should thoroughly wash hands with soap and water after handling this material.

MATERIAL SAFETY DATA SHEET**5. FIRE FIGHTING MEASURES**

FLASH POINT (METHOD): 50° C (122° F) APPROX. FLAMMABLE LIMITS: ND AUTOIGNITION TEMPERATURE: ND

SPECIAL FIRE FIGHTING PROCEDURES:

EXTINGUISHING MEDIA: Carbon dioxide, foam or dry chemical. Caution: Carbon dioxide will displace air in confined spaces and may create an oxygen deficient atmosphere.

UNSUITABLE EXTINGUISHING MEDIA: Water.

Products of Combustion: Forms acrid fumes, carbon monoxide, and carbon dioxide.

Protection of Firefighters: Vapors may be irritating to eyes, skin and respiratory tract. Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Product is slippery when spilled. Isolate the hazard area. Use protective (Nitrile) gloves to avoid skin contact. Wear safety chemical glasses, goggles or face shield to prevent eye contact. Deny entry to unnecessary and unprotected personnel.

Methods for Containment: Keep out of drains, sewers, ditches and waterways. Dike spill area and cap leaking containers as necessary to prevent further spreading of spilled material. Absorb spilled liquid with suitable material such as dirt or sand.

Methods for Clean Up: Eliminate all ignition sources. Use equipment rated for use around combustible materials. Oil soaked with rags may spontaneously combust: place in appropriate disposal container.

Other information: There are no special reporting requirements for spills of this material.

7. HANDLING AND STORAGE

HANDLING: Keep away from heat, sparks, and open flames. Do not allow this material to come in contact with eyes. Avoid prolonged contact with skin. Use in well ventilated areas. Do not breathe vapors. As with any chemical, employees should thoroughly wash hands with soap and water after handling this material.

STORAGE: Product may be packaged in phenolic-lined steel containers or fluorinated plastic containers. Store in well ventilated area with proper sprinkler/fire deterrent system. Storage temperature should not exceed the flash point for extended periods of time. Keep container closed when not in use. Air should be excluded from partially filled containers by displacing with nitrogen or carbon dioxide. Do not cut, drill, grind or weld on or near this container; residual vapors may ignite.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

EYE/FACE PROTECTION: Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying material.

RESPIRATORS: Not normally needed in well-ventilated areas. If adequate ventilation is unavailable, use NIOSH approved air purifying respirator with organic vapor cartridge or canister.

General Hygiene Considerations: Wash hands thoroughly after handling. Have eyewash and emergency shower facilities immediately available. Launder contaminated clothing before reuse.

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9. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT:
-140°F (-96°C), thickens at -108°F (-78°C)

WATER SOLUBILITY:
Insoluble

SPECIFIC GRAVITY (WATER=1.0):
0.838 to 0.843 at 68°F (20° C)

BOIL POINT:
349° F (176° C)

VAPOR PRESSURE:
<2 mm Hg at 68° F (20° C)

Evaporation Rate:
0.2 (BuAc=1)

ODOR:
Fresh citrus orange

COLOR / FORM:
Colorless to pale yellow liquid

VOLATILE ORGANIC COMPOUND:
> 95 % by volume

10. STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: Keep away from heat, sparks and flames.

INCOMPATIBILITY: Strong oxidizing agents and strong acids, including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride.

DECOMPOSITION: Oxides of citrus terpenes, which can result from improper storage and handling, are known to cause skin sensitization.

Hazardous Reactions: To prevent oxidation, avoid long-term exposure to air. If storing partially filled container, fill headspace with an inert gas such as nitrogen or carbon dioxide.

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS: Citrus terpenes have been shown to have low oral toxicity (LD50>5 g/kg) and low dermal toxicity (LD50>5g/kg) when tested on rabbits. Citrus terpenes also showed low toxicity by inhalation (RD501 g/kg) when tested on mice. The skin irritancy of limonene in guinea pigs and rabbits is considered moderate and low, respectively. Inhalation may cause irritation of the nose, throat, and respiratory tract.

CHRONIC EFFECTS: This product is not classified as a carcinogen by OSHA, IARC, ACGIH or NTP. This product has not been shown to produce genetic changes when tested on bacterial or animal cells. This product does not contain known reproductive or developmental toxins. Prolonged or repeated exposure can cause drying or dermatitis of skin. Improper storage and handling may lead to the formation of a possible skin sensitizer.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: There is no information available at this time for this product. However, a spill may produce significant toxicity to aquatic organisms and ecosystems. Some studies have shown that certain bacteria and fungi have the ability to degrade terpenes, decreasing their toxicity to fish. When spilled, this product may act as oil, causing a film, sheen, emulsion or sludge at or beneath the surface of a body of water.

PERSISTENCE/DEGRADABILITY: Product is expected to be readily biodegradable.

BIOACCUMULATION / ACCUMULATION: No appreciable bioconcentration is expected in the environment.

MOBILITY IN ENVIRONMENT: Citrus terpenes volatilize rapidly.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Incinerate or dispose of in accordance with local, state and federal regulations. Taking regulations into consideration, waste may be incinerated or handled through EPA Spill Control Plan via landfill or dilution. Commercially clean containers prior to disposal. Oil soaked rags should be disposed of properly to prevent spontaneous combustion.

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14. TRANSPORTATION

DOT / UN SHIPPING NAME:	Flammable liquid, n.o.s. (Terpene hydrocarbons / Mineral Oil solution)
NA/UN NUMBER:	UN1993
DOT / UN CLASS:	3
PACKING GROUP:	III
AIR TRANSPORT – LABEL:	Flammable liquid
IATA CLASS:	3
OCEAN TRANSPORT: LABEL:	Flammable liquid / marine pollutant
IMDG CLASS:	3
Label/Placard:	Flammable liquid

15. REGULATORY INFORMATION

EC REGULATIONS:

EEC Classification: FLAMMABLE AND IRRITANT
 Symbol: Indication of Danger



Xi Irritant

N, Dangerous to the environment

Risk Phrases: R10 Flammable
 R38 Irritating to skin.
 R43 May cause sensitization by skin contact.

Safety Phrases: S2 Keep out of reach of children.
 S24 Avoid contact with skin.
 S37 Wear suitable gloves.
 S60 This material and its container must be disposed of as hazardous waste.
 S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

CANADIAN REGULATIONS:

DSL: included
 WHMIS Classification: B3 Combustible Liquid
 D2B Toxic. Skin or eye irritant.

OSHA – This material is combustible, which is defined as having a flash point between 100°F (37.8°C) and 200°F (93.3°C). Combustible materials are hazardous according to the OSHA Hazard Communication Standard 29CFR1910.1200.

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

HEALTH = 1
 FLAMMABILITY = 2
 REACTIVITY = 0

This data sheet was prepared in accordance with Directive 91/155/EEC.

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