

Material Safety Data Sheet

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

PRODUCT NAME: LIMASOLVE

Synonyms: None

Recommended Use: Solvent Degreaser

Supplier: Minehan Agencies Pty Ltd

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2. HAZARDS IDENTIFICATION

This product is classified as:

Hazardous Substance according to criteria of the National Occupational Health and Safety Commission (NOHSC).

Dangerous Goods according to the Australian Dangerous Goods Code (ADG Code).

Approved Criteria Classification (Calculated).	FLAMMABLE R10, HARMFUL (Xn) R65 IRRITANT (Xi) R36/37/38 R43 Safety Phrases S1/2, S36/37/39
SUSDP Classification	Poison S5 (d-Limonene)
ADG Classification	Class 3 (Flammable Liquid.)
Un Number	1223

EMERGENCY OVERVIEW

COLOUR	Green
PHYSICAL DESCRIPTION	LIQUID
ODOUR	Lime/Solvent
MAJOR HEALTH HAZARD	Flammable. May cause lung damage if swallowed. Irritating to eyes, skin, & respiratory system. May cause sensitization by skin contact

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POTENTIAL HEALTH EFFECTS

Inhalation: Short term exposure. Vapour is irritating to nose and throat and may cause nausea, vomiting, difficulty breathing, headache, drowsiness, symptoms of drunkenness, and lung congestion. **Long term Exposure.** Possible lung and respiratory tract damage. May trigger pre-existing respiratory complaints.

Skin Contact: Short term exposure. May cause sensitization by skin contact. May cause irritation, defatting, cracking and drying of Skin **Long term exposure.** Prolonged use may cause irritation, redness and dermatitis.

Eye Contact: Short term exposure. Will cause strong irritation to eyes but will not injure eye tissue. **Long-term exposure.** Not know.

Ingestion: Short term exposure. Headaches, nausea, and severe abdominal pain may result. Vomiting may cause product to be aspirated into the lungs possibly resulting in chemical pneumonitis. **Long-term exposure.** Not known

Carcinogen Status

NOHSC	Not Classified
NTP	Not Classified
IARC	Not Classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	CAS No	PROPORTION W/W %
Kerosene (straight run)	8808-20-6	30-60%
Lemon Lime Terpenes	complex mixture	30-60%
Nonylphenol ethoxylate	9016-45-9	5-10%
Other ingredients determined not to be hazardous		to 100%

4. FIRST AID MEASURES

Poison Information Centres in each State capital city can provide additional assistance for Scheduled Poisons: Phone (Australia 13 1126).

Inhalation: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Perform artificial respiration if needed. Allow patient to assume most comfortable position and keep warm. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash contaminated skin for at least 15-20mins with of water, or until no evidence of the chemical remains. If swelling, redness, blistering, or irritation occurs seek medical advice. Wash clothing before re-use.

Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. If present, remove contact lenses. Seek medical attention.

Ingestion: Immediately rinse mouth with water. Do NOT induce vomiting. Seek urgent medical attention.

Notes to Physician: Treat symptomatically. Suggest intubation BEFORE any emesis due to foaming properties of this product.

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5. FIRE FIGHTING MEASURES

Flash Point: 45°C

Fire and Explosion Hazard: Flammable Liquid. Vapour may form explosive mixtures with air. Closed containers exposed to heat may violently explode.

Specific Hazards: Sealed containers may explode in a large fire.

Fire Fighting: Move containers from fire area if it can be done without risk. Cover exposed liquid with foam. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. **Suitable Extinguishing Media:** Use foam, CO₂ or dry chemical powder to extinguish surrounding fire.

Hazardous Decomposition in Products: On burning may emit fumes including carbon monoxide, carbon dioxide, and partially burned hydrocarbons. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Hazchem Code: 3[Y]

6. ACCIDENTAL RELEASE MEASURES

Flammable liquid. Remove all ignition sources. Stop leak if possible without personal risk. Wear protective equipment to prevent personal injury (see section 8). **Small spills (< 5L)** Remove all ignition sources. Cover with an absorbent material (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Hose down area with large amounts of dilute detergent. Caution, Slip Hazard. **Large spills (>5L) Remove all ignition sources. Consider evacuation of area.** Prevent run off into drains and waterways. Dam material. Cover with foam to prevent ignition then apply absorbent material. Collect and seal in properly labelled containers for disposal. Hose down area with large amounts of dilute detergent. Keep unnecessary people away, isolate hazard area and deny entry. If contamination of sewers or waterways has occurred, advise local emergency services.

7. HANDLING AND STORAGE

Store in a well-ventilated area away from heat and ignition sources. Store in a cool, dry place and out of direct sunlight. Store away from foodstuffs, strong oxidizing agents, and strong acids. Store in original containers. Do not store in plastic containers. Keep containers closed when not in use – check regularly for leaks. This material is a Scheduled Poison and a Class 3 Flammable liquid and must be stored, maintained and used in accordance with the relevant regulations. Handle using good industrial hygiene practices (see section 8 on personal protection).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No value has been assigned for this specific material by NOHSC. However exposure limits for ingredients are shown below

Ingredient	TWA	STEL	Notices
Kerosene	85ppm	450ppm	

TWA – the Time-Weighted Average airborne concentrations over an eight hour working day, for a five day week over an entire working life.

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STEL (Short Term Exposure Limit) – the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight hour work day. According to current knowledge, these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Sk Notice – absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Sen Notice-Sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological Limit Value: No biological limit allocated.

Engineering Controls: Use only in well ventilated areas. Exhaust ventilation may be required to prevent build-up of flammable vapours and to maintain air concentrations below Exposure Standards. Flameproof equipment is necessary in any area where product is being used. Product transfer and storage equipment must be earthed. Keep containers closed when not in use.

Personal Protection Equipment

Respirator Type (AS 1716): If inhalation risk exists, wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Eye Protection: Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

Glove Type: Impervious PVC or rubber gloves should be worn.

Clothing: Suitable protective clothing should be worn eg: cotton overalls buttoned at neck and wrist.

Work/Hygienic Practices: Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid		Water Solubility	Forms white emulsion
Colour	Green		Vapour Pressure	0.2 kpa @20°C
Odour	Lime/solvent		Vapour Density	Above 1 (air =1)
Boiling Point	Approx 150 °C		Evaporation Rate	Slower than butyl acetate
Melting Point	NA		% Volatiles	95%
Freezing Point	NA		Flash Point	45 °C
Specific Gravity	0.85g/ml (water =1)		Flammability Limits	LEL 0.7 %- UEL6.0 %
Ph (neat)	NA		Ignition Temperature	237 °C

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Conditions to Avoid: Avoid contact with incompatible materials.

Incompatibilities: Strong Oxidising Agents, Strong Acids

Explosive reactions may occur with strong oxidising agents.

Violent heat producing reactions may occur with strong acids.

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Hazardous Decomposition: Thermal decomposition products include, sulphur dioxide, carbon dioxide, carbon monoxide, and Nitrous oxides.

Polymerisation: Will not polymerise.

11. TOXICOLOGICAL INFORMATION

Limasolve

Local Effects: Harmful by ingestion. Irritant: Inhalation, skin, eyes.

Target Organs: Lungs & Gut.

Classification of Hazardous Ingredients

Ingredients	R Phrases
Kerosene (straight run)	R65
Lemon Lime Terpenes	R36/37/38 R43
Nonyl phenol ethoxylate	R20 R36

Individual Ingredient Information

Kerosine (straight run)

Irritation Data: Rabbit, skin, 500mg, severe

Toxicity Data: Lowest published lethal dose, oral, humans 500mg/kg

Local Effects: Cough, nausea, vomiting

Acute Toxicity Level: Lowest published toxic dose 5.7mg.kg, oral, humans, coughing & nausea

Target Organs: Respiratory system & gastrointestinal tract

Mutagenic Data: mutations in micro-organisms, salmonella typhimurium, 25uL/plate

Reproduction Effects Data: No data available

Lemon Lime Terpenes

Irritation Data: skin rabbit 10%/24hr mild.

Toxicity Data: oral LD50 mouse 5600mg/kg

Local Effects: Irritation to lungs and thorax

Acute Toxicity Level: Toxic by ingestion

Target Organs: Respiratory System, CNS

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Mutagenic Data: mouse fibroblast 0.5pph/21day (enzymatic activation step)

Reproduction Effects Data: Lowest published toxic dose: mouse 3546mg/kg (7-12 day preg) specific developmental abnormalities.

Nonylphenol Ethoxylate

Irritation Data: Eye rabbit, 0.005ml, severe corneal injury; Skin rabbit, capillary injection, sensitisation.

Toxicity Data: LD50 oral rat males, 2.33 ml/kg . LD50 oral rat females, 2.83 ml/kg

Local Effects: Irritant, skin, eyes and Respiratory System

Acute Toxicity Level: Toxic by ingestion

Target Organs: Skin, eyes, Respiratory System, Liver & Kidneys

Mutagenic Data: No information available

Reproduction Effects Data: Developmental effects including extra ribs and other skeletal variations were observed in the foetuses of rats treated with maternally toxic levels.

12. ECOLOGICAL INFORMATION

General Statement: It is expected that this product will have adverse ecological effects. It is recommended that extreme caution be taken to avoid discharge to waterways, grasslands and other areas with local fauna and flora.

Avoid contaminating waterways.

The International Maritime Organisation has identified Nonylphenol ethoxylate as a **MARINE POLLUTANT**.

Nonyl phenol ethoxylate, CAS 9016-45-9, has been shown to have:

Moderate Toxicity in Amphibians, Annelida, & Fish

Slight toxicity in Crustaceans, Molluscs, & Zooplankton.

Toxicity to Fish: LC 50, Fathead Minnow, 96hrs: 4.0 – 5.6 mg/l

Toxicity to Aquatic Invertebrates: LC 50, Daphnia, 48hrs: 16.7 - 27.5 mg/l

Toxicity to Micro-organisms: IC 50, Bacterial Inhibition: > 5000mg/l

Degradability of Nonylphenol ethoxylate

Biodegradation (%) after 5 days: 18%

Biodegradation (%) after 10 days: 33%

Biodegradation (%) after 20 days: 42%

13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority for disposal, show this MSDS for their consideration. Empty containers not to be recycled or used for any other purpose. Dispose in accordance with local regulations.

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14. TRANSPORTATION INFORMATION

UN No	1223
Proper Shipping Name	Flammable Liquid N.O.S.
ADG Code	Class 3
Sub Risk	None
Packing Group	III
Special Precautions	None
Hazchem Code	3[Y]
EPG	3A1
Segregations	Yes

15. REGULATORY INFORMATION

SUSDP: Poison S5

AICS: All of the constituents of this material are listed on the ACIS.

16. OTHER INFORMATION

Issue Date: June 2007

Reason(s) For Issue: Initial Issue

Labelling Details

First line of Label must read: CAUTION Flammable Liquid

Other statements to include

R10	Flammable Liquid
R22	Harmful if swallowed
R36/37/38	Irritating to eyes, skin and respiratory system
R43	May cause sensitization by skin contact
S1/2	Keep locked up and out of reach of children.
S36/37/39	Wear Suitable protective clothing, gloves and eye/face protection
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label wherever possible).

Abbreviations & Acronyms

SUSPD: Standard for the Uniform Scheduling of Drugs and Poisons

ADG: Australian Code for the Transport of Dangerous Goods by Road and rail

N.O.S. Not Otherwise Specified

CAS No: Chemical Abstracts Service Registry Number

UN No: United Nations Number

R-Phrases: Risk Phrases

S-Phrases: Safety Phrases

HAZCHEM Code: Hazardous Chemical emergency action code

NOHSC: National Occupational Health and Safety Commission

IARC: International Agency for Research into Cancer

ACIS: Australian Inventory of Chemical Substances

NTP: National Toxicology Program (USA)

Literary references:

Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(41999)]

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National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011(2003)]
Exposure Standards for Atmospheric Contaminants in the Occupational Environment
Guidance Note [NOHSC: 3008(1995)] National Exposure Standards [NOHSC: 10005(1999)]
List of Designated Hazardous Substances [NOHSC: 10005(1999)]
Standard for the Uniform Scheduling of Drugs and Poison No. 17
The Australian Code for the Transport of Dangerous Goods by Road and Rail EDITION 6

Disclaimer

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product and in particular how to safely handle and use the product in the workplace.

Since Minehan Agencies Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace i.e. a risk analysis.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Minehan Agencies Pty Ltd.