

1. Product and company identification

Product name	PINECHEM 530
Statement of hazardous nature	Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.
Other names	"Terpene alcohol 85-90%."
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(contains alpha-terpineol and dipentene)
Company name	Lawter (N.Z.) Limited
Division	
Address	211 Totara Street Mount Maunganui, 3150 New Zealand
Contact person	4EHSinfo@lawter.com
Telephone number	+ 64 7 572 7089
Fax	
Emergency telephone number	+ 64 800 451719
Recommended use and Limitations on use	
Recommended use	Speciality solvent and frother.
SDS number	300000001769

2. Hazards identification

GHS classification		
Physical hazards	Flammable liquids	Category 4
Health hazards	Acute toxicity, oral	Category 5
	Skin corrosion/irritation	Category 3
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 4
HSNO classification	3.1D, 6.1E, 6.3B, 6.4A, 6.5B, 9.1A, 9.1D, 9.2D.	

Label elements

Symbols



Signal word

Warning

Hazard statement

Combustible liquid. May be harmful if swallowed. Causes mild skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Precautionary statement

Prevention

Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face protection. Keep away from flames and hot surfaces-No smoking.

Response	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire: Use appropriate media for extinction. Call a POISON CENTER or doctor/physician if you feel unwell. Collect spillage.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	Harmful to the soil environment

3. Composition/information on ingredients

Substance or mixture	Mixture		
Chemical property		CAS Number	Concentration (%)
Alpha-Terpineol		98-55-5	80 - < 90
Dipentene		138-86-3	10 - < 20
Pinene-alpha		80-56-8	3 - < 5

4. First aid measures

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 NZ EMERGENCY SERVICES: 111

Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.
Skin contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Eye contact	If this product comes in contact with eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.
Potential delayed effects	Not available.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.
Notes to physician	Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. In acute poisonings by essential oils the stomach should be emptied by aspiration and lavage. Give a saline purgative such as sodium sulfate (30 g in 250 ml water) unless catharsis is already present. Demulcent drinks may also be given. Large volumes of fluid should be given provided renal function is adequate. [MARTINDALE: The Extra Pharmacopoeia, 28th Ed.].

5. Fire-fighting measures

Extinguishing media	Foam. Carbon dioxide (CO2). Dry chemical powder. BCF (where regulations permit). Water spray or fog - Large fires only.
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Fire fighting equipment/instructions	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 100 metres in all directions.
Fire/explosion hazard	• Combustible. • Slight fire hazard when exposed to heat or flame. • Heating may cause expansion or decomposition leading to violent rupture of containers. • On combustion, may emit toxic fumes of carbon monoxide (CO). • May emit acrid smoke. Mists containing combustible materials may be explosive. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.
Hazards from combustion products	Combustion products include: carbon monoxide (CO), carbon dioxide (CO ₂), other pyrolysis products typical of burning organic material.
Fire incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.
Personal protective equipment	Breathing apparatus. Gas tight chemical resistant suit. Limit exposure duration to 1 BA set 30 mins.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Not available.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Spill cleanup methods	<p>MINOR SPILLS Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Control personal contact by wearing protective clothing. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place spilled material in clean, dry, sealable, labelled container.</p> <p>MAJOR SPILLS Environmental hazard - contain spillage. CARE: Absorbent materials wetted with occluded oil must be moistened with water as they may auto-oxidize, become self heating and ignite. Some oils slowly oxidise when spread in a film and oil on cloths, mops, absorbents may autoxidise and generate heat, smoulder, ignite and burn. In the workplace oily rags should be collected and immersed in water. Moderate hazard. Clear area of personnel and move upwind. Alert Emergency Services and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Contain and absorb spill with sand, earth, inert material or vermiculite. Collect recoverable product into labelled containers for recycling. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise Emergency Services.</p>

7. Handling and storage

Handling

Precautions	DO NOT allow clothing wet with material to stay in contact with skin. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid contact with incompatible materials. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use.
Safe handling advice	Avoid contact with skin. Do not eat, drink or smoke when using the product. Keep containers securely sealed when not in use. Avoid physical damage to containers. Handle in accordance with good industrial hygiene and safety practice. Observe manufacturer's storing and handling recommendations.
Prevention of fire and explosion	Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Storage

Suitable storage conditions	Store in original containers. Keep container tightly closed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.
Incompatible materials	HAZARD: Although anti-oxidants may be present, in the original formulation, these may deplete over time as they come into contact with air. Rags wet / soaked with unsaturated hydrocarbons / drying oils may auto-oxidise; generate heat and, in-time, smoulder and ignite. This is especially the case where oil-soaked materials are folded, bunched, compressed, or piled together - this allows the heat to accumulate or even accelerate the reaction Oily cleaning rags should be collected regularly and immersed in water, or spread to dry in safe-place away from direct sunlight.or stored, immersed, in solvents in suitably closed containers. Avoid contact with oxidizing agents.
Safe packaging materials	Metal can or drum Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

8. Exposure controls/personal protection

Exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Pinene-alpha (80-56-8)	TWA	20 ppm

Engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.

An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adequate ventilation in warehouse or closed storage area.

Care: Atmospheres in bulk storages and even apparently empty tanks may be hazardous by oxygen depletion. Atmosphere must be checked before entry.

Requirements of State Authorities concerning conditions for tank entry must be met. Particularly with regard to training of crews for tank entry; work permits; sampling of atmosphere; provision of rescue harness and protective gear as needed.

Personal protective equipment

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Skin protection

Chemical resistant gloves.

Wear safety footwear or safety gumboots, eg. Rubber.

The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

frequency and duration of contact,
chemical resistance of glove material,
glove thickness and
dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.

When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.

Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

Eye/face protection

Wear safety glasses with side shields.

Chemical goggles are recommended.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

Radioactive or thermal hazards

Not available.

Hygiene measures

When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands after handling and before eating. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Clear. White
Odor	Pine
pH	Not applicable.
Melting point/freezing point	Not available
Boiling point, initial boiling point, and boiling range	402.8 °F (206 °C)
Flash point	174.2 °F (79 °C) Pensky-Martens Closed Cup
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	Not available
Flammability limit - lower (%) temperature	Not available
Flammability limit - upper (%)	Not available
Flammability limit - upper (%) temperature	Not available
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available
Vapor density	5.3 (Air = 1)
Evaporation rate	< 1 (BuAC = 1)
Density	0.93 g/cm ³
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Percent volatile	100 % v/v

10. Stability and reactivity

Stability	Product is considered stable and hazardous polymerisation will not occur.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.

11. Toxicological information

Acute toxicity	SWALLOWED Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733). INHALED The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Inhalation hazard is increased at higher temperatures. Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.
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Components	Species	Test Results
Alpha-Terpineol (98-55-5)		
Acute		
<i>Oral</i>		
LD50	Mouse	2830 mg/kg
	Rat	5170 mg/kg
Dipentene (138-86-3)		
Acute		
<i>Oral</i>		
LD50	Rat	5300 mg/kg
Pinene-alpha (80-56-8)		
Acute		
<i>Oral</i>		
LD50	Rat	3700 mg/kg

* Estimates for product may be based on additional component data not shown.

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Symptoms	Irritant effects.
Skin corrosion/irritation	This material can cause inflammation of the skin oncontact in some persons. The material may accentuate any pre-existing dermatitis condition. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Serious eye damage/irritation	This material can cause eye irritation and damage in some persons
Respiratory sensitizer	Due to lack of data the classification is not possible.
Skin sensitizer	May cause an allergic skin reaction.
Germ cell mutagenicity	Due to lack of data the classification is not possible.
Carcinogenicity	Due to lack of data the classification is not possible.
Toxic to reproduction	Due to lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to lack of data the classification is not possible.
Aspiration hazard	Due to lack of data the classification is not possible.
Chronic effects	<p>Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.</p> <p>Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.</p> <p>Substance accumulation, in the human body, may occur and may cause some concern following repeated or longterm occupational exposure.</p> <p>In the presence of air, a number of common flavour and fragrance chemicals can form peroxides surprisingly fast. Antioxidants can in most cases minimise the oxidation.</p> <p>Fragrance terpenes are generally easily oxidised in air. Non-oxidised limonene, linalool and caryophyllene turned out to be very weak sensitizers, however after oxidation limonene hydroperoxide and linalool hydroperoxide are strong sensitizers. Of the patients tested 2.6% showed positive reaction to oxidised limonene, 1.3% to oxidised linalool, 1.1% to linalool hydroperoxide, 0.5% to oxidised caryophyllene, while testing with caryophyllene oxide and oxidised myrcene resulted in few positive patch tests. 2/3 of the patients reacting positive to oxidised terpenes had fragrance related contact allergy and/or positive history for adverse reactions to fragrances.</p> <p>As well as the hydroperoxides produced by linalol, limonene and delta-3-carene other oxidation and resinification effects progressively causes other fairly major changes in essential oil quality over time. Autoxidation of fragrance terpenes contributes greatly to fragrance allergy, which emphasizes the need of testing with compounds that patients are actually exposed to and not only with the ingredients originally applied in commercial formulations.</p> <p>Sensitisation may result in allergic dermatitis responses including rash, itching, hives or swelling of extremities.</p>
Relevant negative data	Not available.

Other information

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

DIPENTENE: IRRITATION

Skin (rabbit): 500 mg/24h - Moderate

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

d-Limonene is readily absorbed by inhalation and ingestion. Dermal absorption is reported to be lower than by the inhalation route. d-Limonene is rapidly distributed to different tissues in the body, readily metabolised and eliminated primarily through the urine.

Limonene exhibits low acute toxicity by all three routes in animals. Limonene is a skin irritant in both experimental animals and humans. Limited data are available on the potential to cause eye and respiratory irritation. Autooxidised products of d-limonene have the potential to be skin sensitisers. Limited data are available in humans on the potential to cause respiratory sensitisation. Autooxidation of limonene occurs readily in the presence of light and air forming a variety of oxygenated monocyclic terpenes. Risk of skin sensitisation is high in situations where contact with oxidation products of limonene occurs.

Renal tumours induced by limonene in male rats is thought to be sex and species specific and are not considered relevant to humans. Repeated exposure affects the amount and activity of liver enzymes, liver weight, blood cholesterol levels and bile flow in animals. Increase in liver weight is considered a physiological adaption as no toxic effects on the liver have been reported. From available data it is not possible to identify an NOAEL for these effects. Limonene is neither genotoxic or teratogenic nor toxic to the reproductive system.

ALPHA-TERPINEOL: TOXICITY

Oral (mouse) LD50: 12.8 mg/kg

Intramuscular (mouse) LD50: 2000 mg/kg

Oral (Rat) TDLo: 2900 mg/kg

IRRITATION

Nil Reported

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.

For terpenoid tertiary alcohols and their related esters:

These substances are metabolised in the liver and excreted primarily in the urine and faeces. A portion is also excreted unchanged. They have low short term toxicity when ingested or applied on the skin. However, repeated and long term use may cause dose dependent harm to both the foetus and mother.

ALPHA-PINENE: IRRITATION

Skin (man): 100% - SEVERE

Skin (rabbit): 500 mg/24h - Moderate

The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

12. Ecological information

Ecotoxicological data

Components		Species	Test Results
Alpha-Terpineol (98-55-5)	LC50	Rainbow trout,donaldson trout	6.6 mg/l, 4 d
Dipentene (138-86-3)	LC50	Rainbow trout,donaldson trout	80 mg/l, 4 d

* Estimates for product may be based on additional component data not shown.

Ecotoxicity	Accumulation in aquatic organisms is expected. Very toxic to aquatic life. May cause long lasting harmful effects to aquatic life.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation	
Bioaccumulative potential	
Octanol/water partition coefficient log Kow	
Alpha-Terpineol	2.98
Dipentene	4.232
Pinene-alpha	4.83
Mobility	Not available.
Other hazardous effects	<p>DO NOT discharge into sewer or waterways.</p> <p>Substances containing unsaturated carbons are ubiquitous in indoor environments. They result from many sources. Most are reactive with environmental ozone and many produce stable products which are thought to adversely affect human health. The potential for surfaces in an enclosed space to facilitate reactions should be considered.</p> <p>Terpenes such as limonene and isoprene contribute to aerosol and photochemical smog formation. Emissions of biogenic hydrocarbons, such as the terpenes, to the atmosphere may either decrease ozone concentrations when oxides of nitrogen are low or, if emissions take place in polluted air (i.e containing high concentrations of nitrogen oxides), leads to an increase in ozone concentrations. Lower terpenoids can react with unstable reactive gases and may act as precursors of photochemical smog therefore indirectly influencing community and ecosystem properties.</p> <p>Complex chlorinated terpenes such as toxaphene (a persistent, mobile and toxic insecticide) and its degradation products, were produced by photoinitiated reactions in an aqueous system, initially containing limonene and other monoterpenes, simulating pulp bleach conditions.</p> <p>The reactions of ozone with larger unsaturated compounds, such as the terpenes can give rise to oxygenated species with low vapour pressures that subsequently condense to form secondary organic aerosol.</p> <p>Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites.</p>

13. Disposal considerations

Disposal methods/information	<p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: • Reduction • Reuse • Recycling</p> <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.</p> <p>DO NOT allow wash water from cleaning or process equipment to enter drains.</p> <p>It may be necessary to collect all wash water for treatment before disposal.</p> <p>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</p> <p>Where in doubt contact the responsible authority.</p> <p>Recycle wherever possible or consult manufacturer for recycling options.</p> <p>Consult State Land Waste Authority for disposal.</p> <p>Bury or incinerate residue at an approved site.</p> <p>Recycle containers if possible, or dispose of in an authorised landfill.</p> <p>Insure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.</p>
Special precautions	Not available.

14. Transport information

HAZCHEM Code Number	3Z
International regulations	
IATA	
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(contains alpha-terpineol and dipentene)
Hazard class	9
Packing group	III

Special transport precautions and conditions Not available.

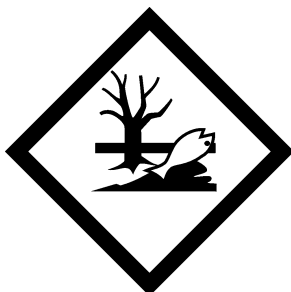
IMDG

UN number UN3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(contains alpha-terpineol and dipentene), MARINE POLLUTANT
Hazard class 9
Packing group III
EmS No. F-A, S-F
Marine pollutant Yes
Special transport precautions and conditions Not available.

IATA; IMDG



Marine pollutant



15. Regulatory information

Applicable regulations HSR002649 Surface Coatings and Colourants (Combustible) Group Standard 2006

New Zealand Inventory of Chemicals (NZIoC): Registration status

Alpha-Terpineol (CAS 98-55-5)	HSNO Approved
Dipentene (CAS 138-86-3)	HSNO Approved
Pinene-alpha (CAS 80-56-8)	HSNO Approved

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

NEW ZEALAND POISONS INFORMATION CENTRE 0800 POISON (0800 764 766)
NZ EMERGENCY SERVICES: 111

References Not available.

Issued by
Lawter (N.Z.) Limited

Prepared by
Not available

Disclaimer The information given is based on data available for the material, the components of the material, and similar materials. Lawter (N.Z.) Limited cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

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