NATURAL SEALER

1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY

Product Identifier:

Product name	Natural Sealer
Synonyms	NAT
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound).
Other means of identification	n/a

Relevant identified uses of the substance/mixture:

Relevant identified use	Sealer thinner.

Details of manufacturer/supplier:

Company name	Peter Fell Ltd
Address	81 Patiki Rd, Avondale, Auckland 1026, New Zealand
Telephone	+64 9 828 6460
Website	www.peterfell.co.nz
e-mail	info@peterfell.co.nz

Emergency telephone number:

Association/Organisation	National Poison Center
Telephone	0800 764 766
Website	www.poisons.co.nz

2: HAZARD IDENTIFICATION

Classification of the substance/mixture:

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

HSNO Classification	3.1C, 6.1E (Oral), 6.1E (Dermal), 6.9 (respiratory irritant), 6.3B, 6.4A, 9.1B.

Label Elements:

Hazard pictogram(s)	

Signal word	Danger

Hazard statement(s):

H226	Flammable liquid and vapour

Precautionary Statement(s) Prevention:

P102	Keep out of reach of children
P103	Read label before use.
P104	Read Safety Data Sheet before use.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilation/lightning/intrinsically safe equipment.
P242	Use non-sparking tool.
P243	Take action to prevent static discharge.
P270	Do not eat, drink or smoke when using this product.
P271	Use only in well-ventilated areas
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P240	Ground and bond container and receiving equipment.
P273	Avoid release to the environment.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary Statement(s) Responses:

P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE/doctor/physician/first aider.
P331	Do NOT induce vomiting.
P308+P313	IF exposed or concerned. Get medical advice/attention
P305+P351+PP338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses., if present and easy to do so. Continue rinsing.
P337+P313	If eye irritation: Get medical advice/attention.
P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor/physician/first aider if you feel unwell.
P391	Collect spillage.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).
P304+P340	IF INHAILED: Remove person to fresh air and keep comfortable breathing.

Precautionary Statement(s) Storage:

P403+P235	Store in a well-ventilated space. Keep cool.
P405	Store locked up.

Precautionary Statement(s) Disposal:

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Other:

If in contact with water hydrolytic decomposition may occur to release small amounts of methanol.

3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances:

See section below for composition of Mixtures.

Mixtures:

Name	CAS Number	Proportion
Silane, trimethoxy (2,4,4-trimethylpentyl)	34396-03-7	<5%
Blend of solvent naphtha (petroleum)	64742-95-6/64742-88-7	balance

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4: FIRST AID

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures:

Eye Contact	- 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.
Skin Contact	- 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.
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.
Ingestion	- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.
	- If swallowed do NOT induce vomiting
	- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
	- Observe the patient carefully.
	- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
	- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
	- Seek medical advice.
	- Avoid giving milk or oils
	- Avoid giving alcohol.

5: FIREFIGHTING MEASURES

Type of Hazard

Flammable liquid and vapour

Fire Hazard Properties

Vapours may form on explosive mixture in air which can be ignited by may sources i.e. electrical motors, pilot lights, open flames and static electricity.

Extinguishing Media

- Foam.
- Dry chemical powder.
- Carbon dioxide.

Advice for firefighters

- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is fire.
- No action shall be taken involving personal risk or without suitable training.
- Move containers from fire area if this can be done without risk.
- Use water spray to keep fire-exposed containers cool.

6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

See Section 6.
Environmental Precautions

See Section 12.

Method and material for containment and cleaning up – Minor spills

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

Method and material for containment and cleaning up – Major spills

Sorbent Type	Rank	Application	Collection	Limitations
cross-linked polymer -particulate	1	blower	skip loader	R, W, SS
treated clay/ treated natural organic - particulate	2	blower	skip loader	R, I
sorbent clay - particulate	3	blower	skip loader	R, I, P
polypropylene - particulate	3	blower	skip loader	W, SS, DGC
feathers - pillow	3	throw	skip loader	DGC, RT
expanded mineral - particulate	4	blower	skip loader	R, I, W, P, DGC

Legend: DGC - Not effective where ground cover is dense; R - Not reusable; I - Not incinerable; P - Effectiveness reduced when rainy; RT - Not effective where terrain is rugged; SS - Not for use within environmentally sensitive sites; W - Effectiveness reduced when windy.
Reference: Sorbents for Liquid Hazardous Substance Cleanup and Control;

7. STORAGE AND HANDLING

Precautions for safe handling.

Safe handling	Containers, even those that have been emptied, may contain explosive vapours.
	Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
	DO NOT allow clothing wet with material to stay in contact with skin
	Electrostatic discharge may be generated during pumping - this may result in fire
	Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Other information	Store in original containers in approved flammable liquid storage area.
	Store away from incompatible materials in a cool, dry, well-ventilated area.
	DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
	No smoking, naked lights, heat or ignition sources

Conditions for safe storage, including any incompatibilities

Suitable container	- Packing as supplied by manufacturer.
	- Plastic containers may only be used if approved for flammable liquid.
	- Check that containers are clearly labelled and free from leaks.
	- For low viscosity materials - drums and jerry cans must be of the non-removable head type.
Storage incompatibilities (Xylene)	- may ignite or explode in contact with strong oxidisers.
	- attack some plastics, rubber and coatings
	- may generate electrostatic charges on flow or agitation due to low conductivity
	- Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents
	- Aromatics can react exothermically with bases and with diazo compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Work place exposure standards

- Exposure limits standards have been established for this material.
- However, exposure standards for ingredients are stated below:

Ingredient Data:

Substance	STEL (mg/m^3)	Stel (ppm)	TWA (mg/m^3)	TWA (ppm)
Silane, trimethoxy (2,4,4-trimethylpentyl)	n/a	n/a	n/a	n/a
Solvent blend naptha (petroleum)	n/a	n/a	525	100
Methanol	328	250	262	200

Methanol may be released during curing.
TWA – Time Waited Average: airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
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.

Application in the workplace:

- According to current knowledge these concentrations should neither impair the health nor cause undue discomfort to, nearly all workers.
- These exposure standards are guidelines 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.

Engineering Controls:

- Flammable liquid, maintain adequate ventiallation at all times.
- Prevent accumulation of vapours in hollows or sups.
- Eliminate any source of ignition.
- Elevated temperature or mechanical action may form vapours, mists, or fumes, may require local, exhaust ventilation systems.

Personal Protection

Personal Protection	
Eye and Face Protection	- Safety glasses with side shields. - Chemical goggles. - Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin Protection	- See Hand protection below
Hand/feet Protection	- Wear chemical protective gloves. - Recommended: PE/EVAL/PE or PVA or Teflon or Viton. - Wear safety footwear or safety gumboots e.g rubber - The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. - The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice.

Body Protection	- Overalls - PVC Apron - PVC protective suit may be required if exposure severe.
Thermal Hazards	Not Available
Other Protection	Respirator – not normay required, but if used should have Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear	Relative Density to water (water =1)	0.832
Physical State	Liquid	Auto-Ignition Temperature (°C)	Not Available
Odour	solvent	Decomposition Temperature (°C)	Not Available
pH	Not Available	Viscosity (cSt)	Not Available
Melting Point (°C)	Not Available	Molecular wight (g/mol)	Not Available
Freezing Point (°C)	Not Available	Taste	Not Available
Boiling Point (°C)	145 - 200	Explosive Properties	Not Available
Flash Point (°C)	41	Oxidising Properties	Not Available
Evaporation Rate	Not Available	Volatile Component (%)	Not Available
Explosive Properties	Not Available	VOC g/L	Not Available
Upper Explosive Limit (%)	7.0	Solubility in water (g/L)	Immiscible
Lower Explosive Limit (%)	0.8	Vapour Density in Air (Air = 1)	Not Available

10. STABILITY AND REACTIVITY

Reactivity	- See Section 7.
Chemical Stability	- Unstable in the presence of incompatible materials. - Product is considered stable - Hazardous polymerization will not occur.
Possibility of Hazardous Reactions	- See Section 7.
Conditions to Avoid	- See Section 7.
Incompatible Materials	- See Section 7.

Hazardous Decomposition Products	- See Section 5.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	- The material can cause respiratory irritation in some persons The body's response to such irritation can cause further lung damage.
	- Inhalation hazard is increased at higher temperatures.
	- Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and co-ordination.
Ingestion	- The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.
	- Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)
Skin Contact	- Skin contact with the material may be harmful; systemic effects may result following absorption.
	- The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time.
	- Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
	- 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
Eye	- There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation.
	- Severe inflammation may be expected with pain.
	- The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis
	- Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
Chronic	- Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.
	- Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
	- There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment..
	- Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects.

Material	Toxicity	Irritation
Natural Sealer	Dermal (rabbit) – no evidence of dermal toxicity.	Eye (human): mild irritant
	Inhalation (rat) LC50: >20 mg/L	Skin (human): mild irritant
	Oral (rat) LD50: >5,000 mg/kgL[2]	

Legend:vValue obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's msds. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

12. ECOLOGICAL INFORMATION

Summary

This mixture is toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Prevent this material from entering waterways, drains and sewers.

Supporting Data

Ecotoxicity	Harmful to aquatic life
Fish	Toxic 1<LC/EC/IC50 <=10mg/L
Aquatic Invertebrates	Toxic 1<LC/EC/IC50 <=10mg/L
Algae	Toxic 1<LC/EC/IC50 <=10mg/L
Degradability	No data
Bioaccumulative Potential	No data
Terrestrial Vertebrate	See acute toxicity
Biocidal	No Data

13. DISPOSAL CONSIDERATIONS

Water Treatment methods

Product/Packaging Disposal	- Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Notice 2017.
	- Containers may still present a chemical hazard/ danger when empty
	- Return to supplier for reuse/ recycling if possible.
	- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
	- Where possible retain label warnings and MSDS and observe all notices pertaining to the product

14. TRANSPORT INFORMATION

Label Requirements

Label Requirements	
Marine Pollutant	
HAZCHEM	3(Y)

Land Transport (UN)

UN Number	1263
Packing Group	III
UN Proper Shipping Name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Environmental Hazard	No relevant date
Transport Hazard Class(es)	Class: 3
	Sub risk: Not Applicable
Special Precautions for users	163;223;367
	Limited quantity: 5 L

Air Transport (ICAO-IATA/DGR)

UN Number	1263
Packing Group	III
UN Proper Shipping Name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Environmental Hazard	No relevant date
Transport Hazard Class(es)	ICAO/IATA Class: 3
	ICAO/IATA Sub Risk: Not Applicable
	ERG Code: 3L
Transport Hazard Class(es)	Special Provisions: A3 A72 A192
	Cargo only Parking Instrucitos:306
	Cargo Only Maximum Qty/Pack: 220 L
	Passenger and Cargo Packing Instructions: 355
	Passenger and Cargo Maximum Quantity Packing Instructions: 60 L
	Passenger and Cargo Limited Quantity Packing Instructions: Y344
	Passenger and Cargo Limited Quantity Packing: 10 L

Sea Transport (IMDG-Code/GGVSee)

UN Number	1263
Packing Group	III
UN Proper Shipping Name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Environmental Hazard	No relevant date

Transport Hazard Class(es)	IMDG Class: 3
	IMDG Sub risk: Not Applicable
Special Precautions for users	EMS Number: F-E, S-E
	Special Provisions: 163;223;367
	Limited quantity: 5 L

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO).

HSR Number	Group Standard
HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2017

Specific Workplace Controls

SDS	To be available within 10 minutes where product is stored.
Labelling	No removal of labels. Original labels must be retained.
Emergency Plan	Required if >10,000 L is stored.
Approved Handler	Not required.
Tracking	Not required.
Bunding and secondary containment	Required if >10,000 L is stored.
Signage	Required if >10,000 L is stored.
Location Test Certificate	Required if >500 L (containers >5L), 1,500 L (containers > or =5L), 250 L (in use) is stored in any one location.
Flammable zone	Must be established if >100 L closed containers, 25 L decanting, 5 L (open occasionally), 1 L (in use) stored in any one location.

Fire extinguisher	If >500 L present.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

16. OTHER INFORMATION

SDS Created	June 2024
SDS Updated	June 2024

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL : No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
AIIC: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory
INSQ: Inventario Nacional de Sustancias Químicas
NCI: National Chemical Inventory
FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances.