

Sealer Thinners

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY

Product Identifier:

Product name	Sealer Thinners
Synonyms	Not applicable.
Proper shipping name	PAINT-RELATED MATERIAL (including paint thinning and reducing compound).
Other means of identification	ABX2824

Relevant identified uses of the substance/mixture:

Relevant identified use	Sealer thinner.
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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 Centre
Telephone	0800 764 766
Website	www.poisons.co.nz

SECTION 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.

GHS Classification	Specific Target Organ Toxicity – Repeated Exposure Category 2, Flammable Liquids Category 2, Acute Toxicity (Inhalation) Category 4, Serious Eye Damage/Eye Irritation Category 2, Reproductive Toxicity Category 2, Hazardous to the Aquatic Environment Acute Hazard Category 1, Aspiration Hazard Category 1, Carcinogenicity Category 2.
HSNO Classification	3.1B, 6.1D (Inhalation), 6.1E (Aspiration), 6.4A, 6.8B, 6.9B, 9.1A.

Label Elements:

Hazard pictogram(s)



Signal Word

Danger

Hazard statement(s):

H373	May cause damage to organs through prolonged or repeated exposure.
H225	Highly flammable liquid and vapour.
H332	Harmful if inhaled.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H410	Very toxic to aquatic life with long lasting effect.
H304	May be fatal if swallowed and enters airways.
H351	Suspected of causing cancer.

Precautionary Statement(s) Prevention:

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P260	Do not breathe mist/vapour/spray
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.
P241	Use explosion-proof electrical/ventilation/lightning/intrinsically safe equipment.
P242	Use non-sparking tool.
P243	Take action to prevent static discharge.
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.
P370+P378	In case of fire: Use alcohol resistant foam and normal protein foam to extinguish.
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.
P312	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 INHALED: Remove person to fresh air and keep comfortable for 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.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Name	CAS Number	Proportion
n-heptane	142-82-5	15 - 30%
cyclohexane	110-82-7	10 - 30%
ethylbenzene	100-41-4	25 - 50%
Xylene	varied	balance

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

SECTION 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.
	- Prosthesises 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.

Ingestion (continued)

- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Observe the patient carefully.
- 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.

Biological Exposure Index (BEI):

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

<i>Determinant</i>	<i>Index</i>	<i>Sampling Time</i>	<i>Comments</i>
Methyl hippuric acids in urine	1.5 gm/gm creatine	End of shift	Not Available
	2.0 gm/min	Last 4 hours of shift	Not Available

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

- Foam, Dry chemical powder, BCF (where regulations permit), Carbon dioxide.

Special hazards arising from the substance or mixture

Fire Incompatibility

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Advice for firefighters

Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course

Fire/Explosion Hazard

- Liquid and vapour are flammable.
- Moderate fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
- Moderate explosion hazard when exposed to heat or flame.
- Combustible products include: Carbon monoxide (CO) and carbon dioxide (CO₂)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Methods and material for containment and clean up.

Minor Spills

- Remove ignition sources.
- Clean up spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

Major Spills

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them the location and nature of the hazard.
- May be violently or explosively reactive.
- Control personal contact with the substance by using protective equipment.

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

Control parameters

Occupational Exposure Limits (OEL)

Ingredient Data:

Source	Ingredient	Material Name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	n-heptane	heptane	400 ppm/ 1,640 mg/m ³	500 ppm/ 2,050 mg/m ³	n/a	n/a
New Zealand Workplace Exposure Standards (WES)	cyclohexane	Cyclohexane	100 ppm/ 350 mg/m ³	300 ppm/ 1,050 mg/m ³	n/a	n/a
New Zealand Workplace Exposure Standards (WES)	ethylbenzene	Ethylbenzene	20 ppm/ 88 mg/m ³	40 ppm/ 176 mg/m ³	n/a	n/a
New Zealand Workplace Exposure Standards (WES)	Xylene	Xylene (o-, m-, p-isomers)	50 ppm/217 mg/m ³	n/a	n/a	n/a

Exposure Controls

Appropriate engineering controls	- CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear.
	- 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.
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 e.g. 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 is severe
Thermal Hazards	- Not Available
Other Protection	Respirator – not normally 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 thin liquid	Relative Density to water (water = 1)	0.80
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 weight (g/mol)	Not Available
Freezing Point (°C)	Not Available	Taste	Not Available
Boiling Point (°C)	Not Available	Explosive Properties	Not Available
Flash Point (°C)	-13	Oxidising Properties	Not Available
Evaporation Rate	Not Available	Volatile Component (%)	100
Explosive Properties	Not Available	VOC g/L	800
Upper Explosive Limit (%)	7.0	Solubility in water (g/L)	Immiscible
Lower Explosive Limit (%)	1.0	Vapour Density in Air (Air = 1)	3.66

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 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.
Eye (continued)	- 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
Sealer Thinners	Not Available	Not Available
n-heptane	Dermal (rabbit) LD50: >2,000 mg/kg ^[2]	Eye: no adverse effect observed.
	Inhalation (rat) LC50: >29.29 ppm/4h ^[2]	Skin: no adverse effect observed.
	Oral (rat) LD50: >5,000 mg/kg ^[2]	
cyclohexane	Dermal (rabbit) LD50: >2,000 mg/kg ^[2]	Eye: no adverse effect observed.
	Inhalation (rat) LC50: >5,540ppm/4h ^[2]	Skin (rabbit): 1,584 mg/48hr - mild
	Oral (rat) LD50: 12,705 mg/kg ^[2]	Skin: adverse effect (irritant)
ethylbenzene	Dermal (rabbit) LD50: >17,800 mg/kg ^[2]	Eye (human): no adverse effect observed.
	Inhalation (rat) LC50: 17.2 mg/kg	Skin (rabbit): 15 mg/24hr - mild
	Oral (rat) LD50: 3,500 mg/kg ^[2]	Eye (rabbit): 500 mg SEVERE
Xylene	Dermal (rabbit) LD50: >1700 mg/kg ^[2]	Eye (human): 200 ppm irritant
	Inhalation (rat) LC50: 5000 ppm/4h ^[2]	Eye (human): 200 ppm irritant
	Oral (rat) LD50: 4300 mg/kg ^[2]	Eye (rabbit): 87 mg mild

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

Sealer Thinners

- 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.

Xylene

- The material may produce severe irritation to the eye causing pronounced inflammation.
- Repeated or prolonged exposure to irritants may produce conjunctivitis.
- 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.
- The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Reproductive effector in rats

12. ECOLOGICAL INFORMATION

Toxicity

Sealer Thinners

- Harmful to aquatic organisms.

Xylene

- log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m³ /mol : 637-879; Henry's atm m³ /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.
- Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process.
- Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces

13. DISPOSAL CONSIDERATIONS

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	3YE

Land Transport (UN)

UN Number	1263
Packing Group	II
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	Environmentally hazardous
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	II
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	Environmentally hazardous
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 Packing Instructions: 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

Sea Transport (IMDG-Code/GGVSee)

UN Number	1263
Packing Group	II
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	Environmentally hazardous
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 substance can be managed under the controls specified in the Transfer Notice or alternatively, it may be managed using the conditions specified in an applicable Group Standard.

HSR Number	Group Standard
HSR002669	Surface Coatings and Colourants Flammable Carcinogenic Group Standard 2020.

Regulatory Lists

Xylene (1330-20-7) is found on the following regulatory lists:

- Internation Agency for Research on Cancer (IARC); Agent Classified by the IARC Monographs
- New Zealand Hazardous Substances and New Organisms (HSNO) Act – Classification of Chemicals.
- New Zealand Inventory of Chemicals
- New Zealand Workplace Exposure Standards (WES)

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers.	Quantity beyond which controls apply when use is occurring in open containers.
3.1B	100 L in containers greater than 5 L	50 L
	250 L in containers up to and including 5L	50 L

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of Substance	Quantities
Not Applicable	Not Applicable

16. OTHER INFORMATION

SDS Created	April 2025
SDS Updated	April 2025

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.