1. Identification of Substance & Company

Product	
	Product name
	PFL Glaze Clean-Up/Thinner
Product code	**GLZCU**
HSNO approval	**HSR02662**
Approval description	**Surface Coatings and Colourants (Flammable) Group Standard 2006**
UN number	**1263**
Proper Shipping Name	**PAINT**
DG class	**3**
Packaging group	**II**
Hazchem code	**3Y**
Uses	**Thinner**
Company Details	
Company	**Peter Fell LTD**
Address	**81 Patiki Rd**
	Avondale
	Auckland
Telephone	**09 828 6460**
Email	**info@peterfell.co.nz**

Emergency Telephone Number: 0800 764 766

2. Hazard Identification

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR02662, Surface Coatings and Colourants (Flammable) Group Standard 2006), and is classified as follows:

Classes	Hazard Statements
3.1B	H225 - Highly flammable liquid and vapour.
6.1D (oral)	H302 - Harmful if swallowed.
6.1E (aspiration)	H304 - May be fatal if swallowed and enters airways.
6.1E (dermal)	H313 - May be harmful in contact with skin.
6.9 (narcotic)	H336 - May cause drowsiness or dizziness.
6.3 A	H315 - Causes skin irritation.
6.4 A	H320 - Causes eye irritation.
6.8 B	H361 - Suspected of damaging fertility or the unborn child.
6.9 B	H373 - May cause damage to organs through prolonged or repeated exposure
9.1B	H411 - Toxic to aquatic life with long lasting effects.
9.3C	H433 - Harmful to terrestrial vertebrates.

SYMBOLS

DANGER

Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

Read label before use.
Keep out of reach of children.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from ignition sources. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/eye/face protection.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Do not breathe vapours.
Avoid release to the environment.
Collect spillage.
Store in a well-ventilated place. Keep cool.
Store locked up
Store in a well-ventilated place. Keep container tightly closed.

Further precautionary statements can be found in Section 4 – First Aid.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Concentration
xylene	1330-20-7	30-60%
cyclohexane	110-82-7	10-30%
n-heptane	142-82-5	10-30%
hexane	110-54-3	1-10%
methylcyclohexane	108-87-2	1-10%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). IF exposed or concerned: Get medical advice/ attention.

Recommended first aid facilities **Ready access to running water is required. Accessible eyewash is required.**

Exposure

Swallowed **IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Immediately call a POISON CENTER or doctor/physician.**

Eye contact **IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.**

Skin contact **IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.**

Inhaled **IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.**

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	Vapours may form an explosive mixture in air which can be ignited by many sources such as pilot lights, open flames, electrical motors, switches and static electricity.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder, foam.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	3Y

6. Accidental Release Measures

Containment	If greater than 1000L is stored, secondary containment and emergency plans to manage any potential spills must be in place.In all cases design storage to prevent discharge to stormwater.
Emergency procedures	In the event of spillage alert the fire brigade to location and give brief description of hazard. Stop the source of the leak, if safe to do so. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Do not use sawdust on concentrate. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
Clean-up method	Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10. Location test certificates must be available if storing >100L (containers >5L), 250L (containers ≤5L), 50L (in use)L. Containers (and outer packaging) must bear the prescribed labelling, including the Hazchem code, UN number, flammability warning and name of contents.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m^3 for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2016)	Ingredient	WES-TWA	WES-STEL
	xylene	50ppm, 217mg/m^3	data unavailable
	cyclohexane	data unavailable	data unavailable
	n-heptane	400ppm, 1640mg/m^3	500ppm, 2050mg/m^3
	hexane	20ppm, 72mg/m3	data unavailable
	methylcyclohexane	400 ppm, 1610 mg/m^3	data unavailable

*** These workplace exposure standards are also Prescribed Exposure Standards (PES) under the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.**

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes

Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible.

Skin

Protective gloves are recommended. PVA or Viton/Butyl gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use. Open cuts, abraded or irritated skin should not be exposed to this material.

Respiratory

A respirator when airborne concentrations approach the WES (section 8). Use a respirator with an organic vapour cartridge and a dust/mist filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	**liquid**
Odour	**strong solvent odour**
pH	**no data**
Vapour pressure	**8.65kPa**
Viscosity	**no data**
Boiling point	**no data**
Volatile materials	**no data**
Freezing / melting point	**no data**
Solubility	**immiscible in water**
Specific gravity / density	**0.80g/cm3**
Flash point	**-15°C**
Danger of explosion	**not explosive**
Auto-ignition temperature	**no data**
Upper & lower flammable limits	**LEL 1.0%, UEL 7.0%**
Corrosiveness	**non corrosive**

10. Stability & Reactivity

Stability	**Stable**
Conditions to be avoided	**Flammable substance. Keep away from sources of ignition at all times. Containers should be kept closed in order to avoid contamination.**
Incompatible groups	**Strong oxidisers, bases and diazo compounds.**
Substance Specific Incompatibility	**May attack some plastics, rubber and coatings.**
Hazardous decomposition products	**Oxides of carbon**
Hazardous reactions	**none known**

11. Toxicological Information

Summary

IF SWALLOWED: can result in nausea, vomiting and central nervous system depression. If the victim is uncoordinated there is greater likelihood of vomit entering the lungs and causing subsequent acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death.
IF IN EYES: may cause eye irritation, resulting in pain and conjunctivitis,
IF ON SKIN: may cause skin irritation, causing redness, swelling and blistering.
IF INHALED: may cause respiratory irritation with coughing, nausea. Inhalation may also cause central nervous system depression with headaches, dizziness, drowsiness, incoordination.
CHRONIC TOXICITY: Prolonged exposure to hydrocarbons can cause nerve damage (CNS) and affect the liver, kidneys and blood. Prolonged exposure to xylene can cause nerve damage (CNS) and affect the liver and kidneys.

Supporting Data

Acute	**Oral**	**Using LD_{50}'s for ingredients, the calculated LD50 (oral, rat) for the mixture is between 300 and 2000 mg/kg. Data considered includes: Xylene 1590 mg/kg (mouse), cyclohexane 813 mg/kg (mouse), hexane 25000mg/kg (rat), methylcyclohexane 2250 mg/kg (mouse). The mixture may also present an aspiration hazard.**
	Dermal	**Using LD50's for ingredients, the calculated LD_{50} (dermal, rat) for the mixture is between 2000 and 5000 mg/kg. Data considered includes: Xylene >1700mg/kg.**
	Inhaled	**Using LC50's for ingredients, the calculated LC50 (inhalation, rat) for the mixture is >20mg/L (vapour). Data considered includes: Xylene 27.6 mg/L (rat, vapour), cyclohexane 13.9 mg/l (rat, vapour inhalation); hexane 48000ppm/4H (rat).**
	Eye	**The mixture is considered to be an eye irritant. Xylene, methylcyclohexane and hexane cause eye irritation**
	Skin	**The mixture is considered to be a skin irritant. Xylene causes skin irritation.**
Chronic	**Sensitisation**	**No ingredient present at concentrations > 0.1% is considered a sensitizer.**
	Mutagenicity	**No ingredient present at concentrations > 0.1% is considered a mutagen.**
	Carcinogenicity	**The mixture is not considered to be a carcinogen. Xylene is classed by IARC as Class 3 - unclassifiable as to carcinogenicity to humans.**
	Reproductive / Developmental	**The mixture is considered to be a suspected reproductive or developmental toxicant. Developmental toxicity: xylene, have been shown to cause foetal toxicity in animals at doses which are maternally toxic. Not expected to impair fertility.**
	Systemic	**The mixture is considered to be a suspected target organ toxicant. Xylene: affected organs: hepatic (liver), Neurological (nervous system), renal (urinary system or kidneys). Chronic overexposure to aliphatic hydrocarbons can cause loss of coordination, reduction in reaction times and central and peripheral nervous system damage (n-Hexane). This substance may cause dizziness and drowsiness.**
	Aggravation of existing conditions	**None known.**

12. Ecological Data

Summary

No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:

Supporting Data

Aquatic	**Using EC_{50}'s for ingredients, the calculated EC_{50} for the mixture is between 1 mg/L and 10 mg/L and at least one of the components is either bioaccumulative or persistent in the aquatic environment. Data considered includes:** **xylene 8.5mg/l (48hr, Palaemonetes pugio (Crustacea)), 3.3 mg/l (96hr, Oncorhynchus mykiss), 10mg/l (72hr, Skeletonema costatum),** **cyclohexane 8.3 mg/l (96hr, Morone saxatilis), 3.78 mg/l (48hr, Daphnia magna), n-heptane 1.5 mg/l 948hr, Daphnia magna),** **hexane 2.50mg/L (96hr, Fathead minnow), 3.9mg/L)48hr, Daphnia magna),** **methylcyclohexane 1.56-2.46 mg/L (48hr, Daphnia magna), 5.8 mg/l (96hr, Morone**

	saxatilis).
Bioaccumulation	No data
Degradability	No data
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	This mixture is considered harmful towards terrestrial vertebrates, see acute toxicity.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data
Environmental effect levels	No evidence of soil toxicity.

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. Transport Information

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a hazardous substance for transport.

UN number:	1263	Proper shipping name:	PAINT
Class(es)	3	Packing group:	II
Precautions:	Flammable liquid	Hazchem code:	3Y

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR02662, Surface Coatings and Colourants (Flammable) Group Standard 2006.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing any quantity.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 1000L is stored.
Approved handler	Required if > 250L (containers >5L), 500L (containers ≤5L) is handled or stored.
Tracking	Not required.
Bunding & secondary containment	Required if > 1000L is stored.
Signage	Required if > 250L is stored in any one location.
Location test certificate	Required if > 100L (containers >5L) 250L (containers ≤5L) 50L (in use) is stored in any one location.
Flammable zone	Must be established if > 100L (closed containers), 25L (decanting), 5L (open occassionally), 1L (in use), stored in any one location is stored in any one location.
Fire extinguisher	If > 250L 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.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	**Approval HSR02662, Surface Coatings and Colourants (Flammable) Group Standard 2006**
CAS Number	**Unique Chemical Abstracts Service Registry Number**
EC_{50}	**Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)**
EPA	**Environmental Protection Agency**
HAZCHEM Code	**Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters**
HSNO	**Hazardous Substances and New Organisms (Act and Regulations)**
IARC	**International Agency for Research on Cancer**
LEL	**Lower Explosive Limit**
LD_{50}	**Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).**
LC_{50}	**Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)**
MSDS (SDS)	**Material Safety Data Sheet (or Safety Data Sheet)**
PES	**Prescribed Exposure Standard means a WES or a biological exposure standard that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).**
STEL	**Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded**
TWA	**Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)**
UEL	**Upper Explosive Limit**
UN Number	**United Nations Number**
WES	**Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.**

References

Data	**Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).**
EPA Transfer Gazettes	**Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)**
WES 2016	**The NZ Workplace Exposure Standards Effective from 2016, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.**
WES 2002	**Workplace Exposure Standards published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred to under the Group Standard (HSNO approval) and may constitute a PES.**
Other References:	**Suppliers SDS**

Review

Date	**Reason for review**
Sept 2022	**Not applicable – new SDS**

Disclaimer