PFL Concrete Cleaner

Safety Data Sheet

1. Identification of Substance and Company

Product name	PFL Concrete Cleaner
HSNO approval	HSR002526
Group Standard	Cleaning Products (Corrosive) Group Standard 2006
UN number	3266
Proper shipping name	Corrosive Liquid, Acidic, N.O.S.
DG class	8
Packaging group	III
Hazchem code	2X
Uses	Neutralization of acid used in concrete surface preparation

Company	Peter Fell Ltd
Address	81 Patiki Rd, Avondale, Auckland
Telephone	09 828 6460
Emergency telephone	New Zealand National Poisons Centre 0800 764 766

2. Hazard Identification

GHS Classification

Classified as Hazardous according to the Hazardous Substances (Classification) regulations 2001.
Classified as Dangerous Goods for transport according to the NZS 5433:2012

Classes	6.1E	Substances that are acutely toxic - May be harmful
	8.2C	Substances that are corrosive to dermal tissue.
	8.3A	Substances that are corrosive to ocular tissue.

Signal word **DANGER**

Pictograms

Hazard Statements

H303	May be harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Precautionary Statements

Prevention	P102	Keep out of reach of children
	P103	Read label before use
	P260	Donot breathe dust/fume/gas/mist/vapours/spray.
	P264	Wash thoroughly after handling.
	P273	Avoid release to the environment
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P101	If medical advice is needed have product container/label at hand
	P310	Immediately call a Poison centre or doctor
	P321	Specific treatment is advised - see first aid instructions.
	P363	Wash contaminated clothing before reuse

	P363	Wash contaminated clothing before reuse.
	P301 +P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	P405	Store locked up.
Disposal	P501	In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

3. Composition/Information on Ingredients

Substances/mixtures

Ingredient	CAS Number	% by Wt	Content
Water	7732-18-5	70.0 - 90.0	
2 Butoxy Ethanol	111-76-2	1.0 - 5.0	
Sodium Metasilicate	3.0 – 8.0	3.0 – 8.0	
Nonionic Surfactant	9016 – 45 - 9	5.0 – 10.0	

4. First Aid

Description of first aid measures

Swallowed	For advice, contact the National Poisons Centre on 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting.
Eyes	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing
Eye wash facilities	Eye wash facilities and safety shower should be available.

Most important symptoms and effects, both acute and delayed
Causes burns

Immediate medical attention and special treatment needed

Treat symptomatically.

For advice in an emergency contact the Poisons Information Centre 0800 764 766 or a doctor at once.

5. Firefighting Measures

Extinguishing Media

Suitable	Use an extinguishing agent suitable for the surrounding fire.

Special hazards arising from the substance or mixture
Non-flammable. May evolve toxic gases if strongly heated.

Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

Hazchem code
2X

2	Fine water spray
X	Wear liquid-tight chemical protective clothing and breathing apparatus. Contain spill and run-off.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

Environmental precautions
Prevent product from entering drains and waterways.

Methods of cleaning up
Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

Reference to other sections
See Sections 8 and 13 for exposure controls and disposal.

7. Storage and Handling

Precautions for safe handling
Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

Specific end uses
No information provided

8. Exposure Controls/Personal Protective Equipment

Control parameters
Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m^3	ppm	mg/m^3
2 – Butoxyethanol (skin) 11-76-2	WES (NZ)	25	-	--	1

Biological limits

No biological limit values have been entered for this product.
Workplace Exposure Standard – Time Weighted Average (WES-TWA*). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

Engineering controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE

Eye / Face	Wear splash-proof goggles. When using large quantities or where heavy contamination is likely, wear a face shield.
Hands	Wear PVC or rubber gloves.
Body	Wear coveralls. When using large quantities or where heavy contamination is likely, wear rubber boots and a PVC apron.
Respiratory	Where an inhalation risk exists, wear a Class P2 (Particulate) respirator.

9. Physical & Chemical Properties

Appearance	Clear red liquid
Odour	Slight odour
Flammability	Non-flammable
Flash point	Not relevant
Boiling point	100°C
Melting point	0°C
Evaporation rate	As for water
pH	13.0
Vapour density	Not available
Specific gravity	1.06
Solubility (water)	Soluble
Vapour pressure	Not available
Upper explosion limit	Not relevant
Lower explosion limit	Not relevant
Partition coefficient	Not available
Autoignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
Odour threshold	Not available

10. Stability & Reactivity

Reactivity
Carefully review all information provided in section 10.

Chemical stability
Stable under recommended conditions of storage.

Possibility of hazardous reactions
Polymerization is not expected to occur.

Conditions to avoid
Avoid shock, friction, heavy impact, heat, sparks, open flames and other ignition sources.

Incompatible materials
Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), metals, heat and ignition sources.

Hazardous decomposition products
May evolve toxic gases if heated to decomposition.

11. Toxicological Information

Information on toxicological effects

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Inhalation:	Inhalation Form: dust/mist; SPECIES: Rat; ENDPOINT: LC50 VALUE: 2.21 mg/l
Ingestion:	REMARK: Ingestion of this chemical is the most common route of entry with subsequent corrosive injury of the gastrointestinal tract being the major concern rather than systemic absorption as for other toxins. Acute oral toxicity LD50 to rats is 1280 mg/kg as a 10% aqueous solution. (. Acute oral toxicity LD50 to mice is 2400 mg/kg as a 10% aqueous solution.
Skin:	SPECIES: Rabbit ENDPOINT: LD50; VALUE: 1350 mg/kg
Eye:	SPECIES: Rabbit, Rat, Guinea Pig and Mouse RESULT: Severe SPECIES: RESULT: Contact with the eyes causes disintegration and sloughing of conjunctival and corneal epithelium, corneal opacification, marked edema, and ulceration; After 7 to 13 days either gradual recovery begins, or there is progression of ulceration and corneal opacification. Complications of severe eye burns are symblepharon (adhesion of the lid to the eyeball) with overgrowth of the cornea by a vascularized membrane, progressive or recurrent corneal ulceration, and permanent corneal opacification.
Acute Over-Exposure:	
Chronic Effects:	None listed.

12. Ecological Information

Toxicity	If released to waterways, alkaline products may change the pH of the waterway. Fish will die if the pH reaches 10-11 (goldfish 10.9, bluegill 10.5). Do not release into waterways, long lasting effects
Persistence and degradability	No information provided.
Bio accumulative potential	No information provided.
Mobility in soil	No information provided.
Other adverse effects	No information provided.

13. Disposal considerations

Waste treatment methods

Waste disposal	Neutralise with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amounts, absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).
Legislation	Dispose of in accordance with relevant local legislation.

14. Transport Information

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS 5433:2012, UN, IMDG OR IATA

	LAND TRANSPORT (NZS 5433)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN Number	3266	1760	1760
Proper Shipping Name	CORROSIVE LIQUID, BASIC N.O.S.	CORROSIVE LIQUID, N.O.S.	CORROSIVE LIQUID, N.O.S.
Transport hazard class	8	8	8
Packing Group	III	III	III

Environmental hazards	No information provided.
Special precautions for user	
Hazchem code	2X
EMS	F-A, S-B

15. Regulatory Information

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

Approval code	HSR 002526
HSNO Classes	8.2B, 8.3A, 9.1C
Group standard	Cleaning Products (Corrosive) Group Standard 2006
Inventory listings	NEW ZEALAND: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt.

	Trigger Quantity
Approved Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg/L
Emergency Response Plan	1000kg/L
Secondary Containment	1000kg/L
Restriction of Use	None

16 Other Information

Personal Protective Equipment Guidelines

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health Effects from Exposure

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemicalcompounds CCID
	Chemical Classification and Information Database (HSNO)
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
EPA	Environmental Protection Authority [New Zealand] GHS
	Globally Harmonized System
HSNO	Hazardous Substances and New Organisms IARC
	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration LD50
	Lethal Dose, 50% / Median Lethal Dose
mg/m^3	Milligrams per Cubic Metre OEL
	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure) STOT-SE
	Specific target organ toxicity (single exposure)
TLV	Threshold Limit Value
TWA	Time Weighted Average

New Zealand National Poison Information Centre (24 hours): 0800 POISON [764 766]
New Zealand Emergency Services: 111
For General Information: John Crombie, Manager, Marketing Chemicals Ltd,

Phone: +64 (09) 634 3862 **End of SDS**