

PFL Surface Prep Lite

PFL Surface Prep Lite is a less corrosive, non-fuming alternative to traditional etching products used to prepare concrete surfaces for sealing.

1. Description

PFL Surface Prep Lite is an alternative to PFL Surface Preparation for the preparation of concrete floors for sealing. Utilizing the latest 'acid avoidance' technology, PFL Surface Prep Lite is non-fuming. The elimination of corrosive fumes of traditional inorganic acids significantly improves safety, especially in interior or poorly ventilated sites. The action on the surface also reduces the chance of over etching or darkening of the concrete of traditional products. PFL Surface Prep Lite is recommended for the preparation of lighter concrete colours from the PeterFell Range. The milder action had a reduced corrosive effect on paintwork and metal surfaces.

This product guide covers the surface preparation and application of PFL Surface Prep Lite - if there is any question as to the suitability or application of this product please contact Peter Fell Ltd prior to use. Refer to the SDS for full Health and Safety information.

2. Precautions

- PFL Surface Prep Lite is a CORROSIVE SOLUTION and should be used with extreme care - please ensure all safety guidelines are read prior to use and are strictly adhered to during application.
- PFL Neutralizer & Cleaner should be used in conjunction with PFL Surface Prep Lite to control and neutralize its corrosive activity.
- All susceptible surfaces i.e. walls and joinery, should be protected from splashing during application.
- Ensure runoff during application is correctly neutralized to prevent corrosion of surrounding surfaces i.e. untreated concrete, asphalt etc.
- DO NOT dispose of PFL Surface Preparation Lite down drains or waterways.

3. Test Area

Prior to full application of PFL Surface Prep Lite it is recommended that a small test area away from the main visual area of the floor is prepared (following instructions) to ensure that the product is correctly diluted for your application.

Correctly diluted	The PFL Surface Prep Lite 'bubbles' lightly on the surface, and following short exposure (<1 min), neutralization, and drying, the area appears free of surface laitance (dusty or 'chalky' substance on surface).
Too concentrated	Aggressive bubbling is observed on application of the PFL Surface Prep Lite, and after a short period (<1 minute) concrete starts to corrode, exposing sand grains, then aggregate particles. Following neutralization and drying, concrete appears darker with 'grainy' or textured appearance.
Too dilute	Little to no 'bubbling' evident following application of the PFL Surface Prep Lite, and following neutralization and drying, the area appears unchanged.

If the concrete surface is still 'soft' (if concrete is not fully cured or incorrectly finished) PFL Surface Prep Lite will have a corrosive effect, like that of a 'too concentrated' solution.

Always start with the weakest applicable dilution as the concentration can always be increased.

- Conversely, if the solution is too concentrated and adversely alters the concrete surface, the effects are a lot more difficult to remedy, if at all!

If you are unsure about the appropriate dilution or application of PFL Surface Prep Lite contact Peter Fell Ltd before proceeding with the entire area.

4. Preparation

The concrete must be clean and free of any contamination prior to application of PFL Surface Prep Lite. Floors can be cleaned with **PFL Neutralizer and Cleaner** or **PFL Concrete Cleaner** – see Product Guides for application instructions.

Ensure all susceptible surfaces i.e. walls, joinery etc, are protected from any contact with PFL Surface Prep Lite.

- Polythene or cardboard can be used to protect walls and joinery
- PFL Neutralizer & Cleaner can be used to wipe down other surfaces to protect from splashes.

5. Equipment

- Polythene sheet or tray (placed under watering cans when diluting the surface preparation).
- Plastic watering can (x2).
- Hose (or source of fresh clean water).
- Broom – soft bristle
- PFL Neutralizer & Cleaner (prepared diluted solution)
- Wet and Dry Vacuum cleaner (interior floors only).
- Safety Equipment – see section 8. Personal Protective Equipment.

6. Application

Dilution:

- Dilute PFL Surface Prep Lite with clean water to the appropriate concentration.
 - ALWAYS add PFL Surface Prep Lite to water (not the other way around).
- Place watering can on polythene sheet or soil off the concrete surface
 - Any spills of concentrated surface preparation will burn the concrete surface, so prepare all solutions away from the concrete surface.

Strength	Dilution (Prep:water)	Description
Mild etch	1:3	Recommended for preparation of internal floors, or areas with minimal surface laitance. Will not significantly alter texture of the floor.
Medium etch	No dilution	Recommended for preparation of internal or external concrete surfaces where laitance is evident on the surface.

- Prepare 1:20 dilution of PFL Neutralizer & Cleaner in the second watering can.
 - This solution is used to 'neutralize' the effects of PFL Surface Prep Lite, enabling tight control of the etching process.

Application:

Apply PFL Surface Preparation Lite to small areas at a time (initially 2 - 4 m²) and start away from main parts of the floor to get comfortable with procedure.

- Prepare diluted solution of PFL Surface Preparation Lite and PFL Neutralizer & Cleaner as described above.
- Wet down area with clean water, making sure water is ALWAYS visible on the surface where PFL Surface Preparation Lite is applied.
- Disperse solution with watering can in a controlled motion.
 - Solution can be moved around with soft bristle broom, ensuring solution is spread evenly over surface.
 - Take care not to 'sweep' aggressively as this will damage the concrete surface.
 - Care must be taken NOT to exceed area which has been pre-wetted.
- Once initial reaction has stopped (typically 1-2 minutes), treat area with PFL Neutralizer & Cleaner, leave on surface for a few minutes (solution turns 'milky' in patches)
 - Internal surfaces: Vacuum up with wet and dry vacuum.
 - External surfaces: Use excess water to wash solution off concrete surface ensuring runoff does not go down waterways, or onto areas susceptible to pH changes i.e. gardens.
- Repeat process over whole area to be treated, remembering to keep surface wet.
- Once complete, rinse floor with clean water, using wet and dry vacuum to remove from the interior surfaces.

Coverage:

- Coverage is dependent on dilution rate.

Clean-up:

- All equipment should be neutralized and cleaned with appropriately diluted solution of PFL Neutralizer & Cleaner.
 - Ensure runoff does not go down waterways, or onto area's susceptible to pH changes i.e gardens.

7. Storage and Handling

Pack Sizes: 1, 2, 5, 10, and 20 L.

Handling: Wear suitable protective clothing (see section 8. Personal Protective Equipment).

Storage: Store in cool, dry, well ventilated place in original container. Store out of reach of children. Protect against static discharge. Store away from direct sunlight, oxidizing agents (e.g. nitrates, peroxides, hypochlorites), acids, anionic detergents (e.g. soap), heat sources and foodstuffs. Ensure container is sealed when not in use and checked regularly for leaks or spills. Do not allow vapours to collect in enclosed spaces. PFL Surface Preparation Lite can be stored for up to 12 months.

8. Personal Protective Equipment

- Eyes:** Avoid contact with eyes. Use safety glasses and/or chemical splash goggles.
- Skin:** Suitable protective workwear e.g. cotton overalls buttoned at the neck and wrist is recommended. Chemical resistance apron is also recommended where large quantities are handled.
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.
Rubber safety boots.
- Respiratory:** A respirator is recommended. Use a respirator with an acid gas cartridge and a full-face mask. Ensure that the cartridges are correct for the potential air contamination and are in good working order. Refer to MSD for full safety information.

Refer to the SDS for full Health and Safety information.

9. First Aid

- Swallowed:** DO NOT induce vomiting. Give water or milk to drink. Obtain medical attention immediately. For emergency information contact the *National Poisons Centre (0800 764 766)*.
- Eyes:** Immediately flood with copious quantities of water, holding eye open if necessary, for at least 15 minutes. Seek urgent medical attention.
- Skin:** Remove contaminated clothing and shoes and wash skin thoroughly with soapy water. If irritation occurs or persists, seek medical attention. Launder clothing and clean shoes before re-use.
- Inhalation:** Remove patient from exposure, keep warm and at rest. If there is respiratory distress, give oxygen and seek immediate medical attention.

10. Physical Properties and Identification

- Appearance:** clear hazy liquid
- pH:** <1
- UN Number:** 3265
- HSNO Approval:** HSR002491
- Hazchem code:** 2X
- DG Class:** 8
- Packing Group:** III

Product Warranty

The information contained in this document is true and accurate to the best knowledge of Peter Fell Ltd. We cannot however anticipate all conditions under which this information and our products may be used. Peter Fell Ltd therefore accepts no responsibility and offers no warranty with respect to results obtained by the application of our products, their suitability, or for their safe use. Peter Fell Ltd offers our products for sale subject to, and 'The Customer' and all users are deemed to have accepted, our Terms and Condition of Trade. Peter Fell Ltd warrants our products to be free of manufacturing defects. If the product when purchased was defective and was within recommended storage life when used, Peter Fell Ltd will replace the defective product with new product without charge to the purchaser. Peter Fell Ltd makes NO OTHER WARRANTY, either expressed or implied, concerning our products.

1. Identification of Substance and Company

Product name	PFL Surface Prep Lite
Codes	SPRPLITE10L, SPRPLITE1L, SPRPLITE200L, SPRPLITE20L, SPRPLITE5L, SPRPLITETP
HSNO approval	HSR002491
UN number	3265
Proper shipping name	Corrosive Liquid, Acidic, Organic NOS
DG class	8
Packaging group	III
Hazchem code	2X
Uses	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 (min degree of hazard) regulations 2001 New Zealand. Classified as Dangerous Goods for transport according to the NZS 5433:2012
Classes	6.1D(Oral) Substance that is acutely toxic 6.3A Substance that is irritating to skin 8.1A Substance that is corrosive to metals 8.3A Substance that is corrosive to ocular tissue
Hazard Statements	H290 May be corrosive to metals H302 Harmful if swallowed H315 Causes skin irritation H318 Causes serious eye damage



Precautionary Statements

Prevention	P101 Keep out of reach of children P103 Read label before use P234 Keep only in original container P264 Wash contaminated skin thoroughly after handling P270 Do not eat, drink or smoke when using this product P280 Wear protective gloves/clothing/eye & face protection
Response	P101 If medical advice is needed have product container/label at hand P301+P312 If swallowed call a Poison Centre or doctor if you feel unwell P302+P352 If on skin wash with plenty of soap and water P305+P351+P338 If in eyes rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing P310 Immediately call a Poison centre or doctor

P330	Rinse mouth
P332+P313	If skin irritation occurs get medical advice
P362	Take off contaminated clothing and wash before reuse
P390	Absorb spillage to prevent material damage

Storage P406 Store in corrosive resistant/container with inner liner

Disposal P501 In the case of a substance that is in compliance with a HSN0 approval other than Part 6A approval a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance that in accordance with the hazardous substances (disposal) regulations 2001. This may include any method of disposal that must be avoided.

3. Composition/Information on Ingredients

Ingredients	Mineral acid salt of organic amide	10 – 50%
	DPG Methyl Ether	1 – 20%
	Propylene glycol mono butyl ether	1 – 20%
	N-Methylpyrrolidone	1 – 20%

4. First Aid

Swallowed Rinse mouth with water and provide water to drink. Do not induce vomiting.

Eyes Contact with eyes will cause irritation and could cause damage. Flush with water for at least 15 minutes, seek medical assistance if required.

Skin Irritating, wash with soapy water, if effect persists obtain medical advice.

Inhalation Move victim to fresh air immediately, prevent loss of body heat, apply artificial respiration and seek medical advice

Health Hazards – Acute

Swallowed Product is toxic and **harmful**, vomiting may lead to aspiration in the lungs - give water to drink do not induce vomiting.

Eyes Causes moderate to severe irritation and inflammation - rinse for 15 min with water.

Skin Can cause defatting and drying and therefore irritant dermatitis - rinse well with soap and water.

Inhaled Harmful R20/21/22, vapours are irritating to nose and throat causing nausea, lack of co-ordination and possible loss of consciousness.

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 carbon dioxide, dry powder or water spray.

Unsuitable DO NOT USE WATER JET.

Hazards from Combustion	Under fire conditions this product may emit toxic/irritating fumes, smoke and gasses including carbon monoxide, carbon dioxide and oxides of nitrogen.
Specific Hazards	This product will burn if exposed to fire.
Hazchem code	2X
Precautions in connection with fire	Fire fighters should wear Self Contained Breathing Apparatus (SCBA) operated in positive mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

6. Accidental Release Measures

Spills and Disposal	Avoid inhaling vapours or mists and protect eyes and skin. Prevent liquid from entering sewers, water courses or low-lying areas. Dam areas with sand or soil. Retain contaminated liquids and sand or soil into marked containers. Dispose according to local body and government regulations. Small spills can be absorbed with sand, soil or perlite and placed in marked containers for disposal. Clean up using soap and water or biodegradable cleaner. Advise local authority of spill.
Personal protection-	Wear long sleeves, long trousers, safety boots and tight glasses. Advice to medical treaters – supply safety data sheet to facilitate treatment.
Engineering Contractors	Use local exhaust ventilation. Protect against static discharge. Control exposure levels to below standards, use flame proof equipment where required. Keep out of reach of children.

7. Storage and Handling

Wear long sleeves, long trousers, safety boots and tight glasses.
Advice to medical treaters – supply safety data sheet to facilitate treatment

Engineering contractors	Use local exhaust ventilation. Protect against static discharge. Control exposure levels to below standards, use flame proof equipment where required. Keep out of reach of children.
Storage	Store in a cool dry ventilated area away from ignition sources, oxidising sources and sunlight(heat). Containers should be tightly closed and labelled.

8. Exposure Controls/Personal Protective Equipment

No exposure standards have been established for the mixture. However over exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions.

Biological Limit Value	No biological limits allocated
Engineering controls	Use ventilation to control emissions and build up in rooms and wear appropriate respiratory equipment
Eye protection	Safety glasses with full face shield should be used
Hand protection	Wear impervious gloves
Body protection	Suitable protective workwear e.g. cotton overalls buttoned at the neck and wrist is recommended. Chemical resistant apron is also recommended where large quantities are handled.

9. Physical & Chemical Properties

Appearance	Clear hazy liquid
Boiling Point	100°C
pH	<1

10. Stability & Reactivity

Stable at room temperatures and pressure.
Avoid sources of heat and open flame.
Incompatible Materials – strong oxidising agents,

11. Toxicological Information

No toxicological data available for this product.

Ingestion	Harmful if swallowed can cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.
Inhalation	May cause irritation of the nose, throat and respiratory system.
Skin	Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking which may lead to dermatitis. Test results indicated it is not corrosive to skin (49 CFR 173.137)
Eye	Causes eye damage. Contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.
Respiratory sensation	Not expected to be a respiratory sensitiser
Skin sensitisation	Not expected to be a skin sensitiser
Germ cell mutagenicity	Not a hazard
Reproductive toxicity	Not considered to be toxic
STOT	Single exposure – not expected to cause toxicity to a specific target organ
Aspiration hazard	Not expected to be an aspiration hazard

12. Ecological Information

Ecotoxicity	No ecological data available for this material Prevent from entering waterways, drains or sewers
Mobility	Miscible in water

13. Disposal considerations

Comply with local body and national authorities
Do not dispose into the sewerage system, drains or watercourses
This product can be disposed through a licensed commercial waste collection service – product is a combustible substance and therefore must be sent to an approved high temperature incineration plant for disposal
The container must be cleaned and rendered incapable of holding any substance or if recycling all hazardous residues thoroughly cleaned.

14. Transport Information

UN number	3265
Proper shipping name	Corrosive Liquid, Acidic, Organic NOS
DG Class	8
Sub risk	none
Packing group	III
Hazchem	2X
Dangerous goods segregation	This product is classified as Dangerous Goods Class 8, packing group III Not to be loaded with explosives, oxidising substances, Organic Peroxides, Food items. Please consult the land transport rule : Dangerous goods 2005, and NZS 5433:1999 Transport of dangerous goods on land for information

15. Regulatory Information

Classified as hazardous HSNO – HSR002491

16. Other Information

Date of preparation of SDS 4 April 2018