

### 1. Identification of Substance & Company

#### Product

<b>Product name</b>	PFL Surface Prep Lite
<b>Product code</b>	NA
<b>HSNO approval</b>	HSR002658,
<b>Approval description</b>	Surface Coatings and Colourants (Corrosive) Group Standard 2017
<b>UN number</b>	3265
<b>Proper Shipping Name</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
<b>DG class</b>	8
<b>Packaging group</b>	III
<b>Hazchem code</b>	2X
<b>Uses</b>	liquid concrete surface treatment

#### Company Details

<b>Company</b>	<b>Peter Fell LTD</b>
<b>Address</b>	81 Patiki Rd Avondale Auckland
<b>Telephone</b>	09 828 6460
<b>Email</b>	info@peterfell.co.nz

**Emergency Telephone Number: 09 8286460**

### 2. Hazard Identification

#### Approval

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002658, Surface Coatings and Colourants (Corrosive) Group Standard 2017). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Minimum Degrees of Hazard) Notice 2017.

Classes	Hazard Statements
6.1D (oral)	H302 - Harmful if swallowed.
6.1E (respiratory irritation)	H335 - May cause respiratory irritation.
6.3A	H315 - Causes skin irritation.
8.3A	H318 - Causes serious eye damage.
8.1A	H290 - May be corrosive to metals.
6.8A	H360 - May damage fertility or the unborn child.
9.1D	H402 - Harmful to aquatic life.
9.3C	H433 - Harmful to terrestrial vertebrates.

#### SYMBOLS

# DANGER



#### Other Classifications

There are no other classifications that are known to apply.

#### Precautionary Statements

- P101 - If medical advice is needed, have product container or label at hand.
- P102 - Keep out of reach of children.
- P103 - Read label before use.
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P234 - Keep only in original container.

P261 - Avoid breathing vapours.  
P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/eye protection/face protection.  
P281 - Use personal protective equipment as required.  
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.  
P330 - Rinse mouth.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P332+P313 - If skin irritation occurs: Get medical advice/ attention.  
P362 - Take off contaminated clothing and wash before re-use.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTRE or doctor/physician.  
P390 - Absorb spillage to prevent material damage.  
P308+P313 - IF exposed or concerned: Get medical advice/ attention.  
P406 - Store in a corrosive resistant container with a resistant inner liner.  
P405 - Store locked up.

### 3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Carbamide Hydrochloride	506-89-8	10-50%
Glycol ethers	proprietary	<10%
NMP (N-methyl pyrrolidone)	872-50-4	~1%
Ingredients not contributing to HSNO classes	mixture	>60%

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 harmed, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

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

#### Exposure

**Swallowed**      IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth.

**Eye contact**      IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.

**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 CENTRE or doctor/physician if you feel unwell.

#### Advice to Doctor

Treat symptomatically

### 5. Firefighting Measures

<b>Fire and explosion hazards:</b>	There are no specific risks for fire/explosion for this chemical. It is non-flammable.
<b>Suitable extinguishing substances:</b>	Carbon dioxide, extinguishing powder, foam, fog sprays.
<b>Unsuitable extinguishing substances:</b>	Unknown.
<b>Products of combustion:</b>	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.
<b>Protective equipment:</b>	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
<b>Hazchem code:</b>	2X

### 6. Accidental Release Measures

<b>Containment</b>	If greater than 100L 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 storm water.
<b>Emergency procedures</b>	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. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
<b>Clean-up method</b>	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.
<b>Disposal</b>	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.
<b>Precautions</b>	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

### 7. Storage & Handling

<b>Storage</b>	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.
<b>Handling</b>	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

### 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 3mg/m<sup>3</sup> for respirable particulates and 10mg/m<sup>3</sup> for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Dipropylene Glycol Methyl Ether	606mg/m <sup>3</sup> , 100ppm (skin)	909mg/m <sup>3</sup> , 150ppm (skin)
	NMP (N-methylpyrrolidone)	25ppm, 103 mg/m <sup>3</sup>	75ppm, 309 mg/m <sup>3</sup>

\* 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. Select eye protection in accordance with AS/NZS 1337.

#### Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Nitrile, Viton or Neoprene gloves are recommended. Protective gloves or suitably resistant material must comply with AS2161. Replace frequently. Gloves should be checked for tears or holes before use. Protective clothing must comply with AS 2919, AS3765.1 or AS3765.2. PVC or rubber boots must comply with AS/NZS 2210.2 and selected and maintained in accordance with AS/NS2210.1. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling. A respirator when airborne concentrations approach the WES (section 8). Respirators must have filters appropriate to the duty and comply with AS/NZS1716 and selected, used and maintained in accordance with AS/NS 1715. Use a respirator with an organic vapour/acid gas cartridge. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order. Fit testing and clear guidelines and training for use and maintenance of PPE are necessary.

#### Respiratory

### WES Additional Information

Not applicable

## 9. Physical & Chemical Properties

<b>Appearance</b>	clear hazy liquid
<b>Odour</b>	no data
<b>pH</b>	<1
<b>Vapour pressure</b>	no data
<b>Viscosity</b>	no data
<b>Boiling point</b>	100°C
<b>Volatile materials</b>	no data
<b>Freezing / melting point</b>	no data
<b>Solubility</b>	soluble in water
<b>Specific gravity / density</b>	no data
<b>Flash point</b>	non flammable
<b>Danger of explosion</b>	no data
<b>Auto-ignition temperature</b>	no data
<b>Upper &amp; lower flammable limits</b>	no data
<b>Corrosiveness</b>	corrosive to metals and eyes

## 10. Stability & Reactivity

<b>Stability</b>	Stable
<b>Conditions to be avoided</b>	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
<b>Incompatible groups</b>	Oxidisers and bases
<b>Substance Specific Incompatibility</b>	none known
<b>Hazardous decomposition products</b>	Oxides of carbon,
<b>Hazardous reactions</b>	none known

### 11. Toxicological Information

#### Summary

IF SWALLOWED:

IF IN EYES: Causes serious eye damage.

IF ON SKIN: Repeated or prolonged skin contact with this product may produce skin irritation.

IF INHALED: may cause respiratory irritation. CHRONIC TOXICITY: N-methyl pyrrolidone is a known reproductive and developmental toxicant.

#### Supporting Data

<b>Acute</b>	<b>Oral</b>	Using LD <sub>50</sub> 's for ingredients, the calculated LD <sub>50</sub> (oral, rat) for the mixture is between 300 and 2000mg/kg. Data considered includes: Carbamide Hydrochloride 1120.9mg/kg (rat), Glycol ether 1900 mg/kg (rat), NMP (N-methyl pyrrolidone) 3500 mg/kg (rabbit).
	<b>Dermal</b>	Using LD <sub>50</sub> 's for ingredients, the estimated LD <sub>50</sub> (dermal, rat) for the mixture is >5000 mg/kg.
	<b>Inhaled</b>	Using LC <sub>50</sub> 's for ingredients, the estimated LC <sub>50</sub> (inhalation, rat) for the mixture is >5mg/L. Vapours may be irritating to the respiratory system.
	<b>Eye</b>	The mixture is considered to be an eye irritant, because Carbamide Hydrochloride is considered an eye corrosive in more concentrated form.
	<b>Skin</b>	The mixture is considered to be a skin irritant, because some of the ingredients present are considered skin irritants in more concentrated form.
<b>Chronic</b>	<b>Sensitisation</b>	No evidence of skin sensitisation.
	<b>Mutagenicity</b>	No ingredient present at concentrations > 0.1% is considered a mutagen.
	<b>Carcinogenicity</b>	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	<b>Reproductive / Developmental</b>	The mixture is considered to be a known or presumed reproductive or developmental toxicant, because NMP (N-methyl pyrrolidone) present in greater than 0.1% is known or presumed to be a reproductive or developmental toxicant. Animal studies have shown NMP may reduce male fertility and female fecundity and show developmental toxicity (resorptions, malformations, reduced litter size, reduced postnatal survival and reduced pup body weight).
	<b>Systemic</b>	No ingredient present at concentrations > 1% is considered a target organ toxicant.
	<b>Aggravation of existing conditions</b>	None known.

### 12. Ecological Data

#### Summary

This mixture may be harmful in the aquatic environment and towards terrestrial vertebrates.

#### Supporting Data

<b>Aquatic</b>	Using EC <sub>50</sub> 's for ingredients, the estimated EC <sub>50</sub> for the mixture is between 10 mg/L and 100 mg/L. data considered includes: Carbamide Hydrochloride 71mg/L (ceriodahnia dubia (48h)), This mixture has a low pH.
<b>Bioaccumulation</b>	No data
<b>Degradability</b>	No data
<b>Soil</b>	No evidence of soil toxicity.
<b>Terrestrial vertebrate</b>	See acute toxicity.
<b>Terrestrial invertebrate</b>	No evidence of toxicity towards terrestrial invertebrates.
<b>Biocidal</b>	no data

### 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 of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and 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.

#### Disposal method

**Contaminated packaging** Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

### 14. Transport Information

#### Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

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

<b>UN number:</b>	3265	<b>Proper shipping name:</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
<b>Class(es)</b>	8	<b>Packing group:</b>	III
<b>Precautions:</b>	CORROSIVE LIQUID	<b>Hazchem code:</b>	2X

### 15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002658, Surface Coatings and Colourants (Corrosive) Group Standard 2017.

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.
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied
Labelling	Must comply with the Hazardous Substances (Labelling) Notice 2017.
Emergency plan	Required if > 100L is stored.
Certified handler	Not required.
Tracking	Not required.
Bundling & secondary containment	Required if > 100L is stored.
Signage	Required if > 1000L is stored.
Location compliance certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

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

<b>Approval Code</b>	Approval HSR002658, Surface Coatings and Colourants (Corrosive) Group Standard 2017 Controls, EPA. <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
<b>CAS Number</b>	Unique Chemical Abstracts Service Registry Number
<b>Ceiling</b>	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
<b>Controls Matrix</b>	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
<b>EC<sub>50</sub></b>	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
<b>EPA</b>	Environmental Protection Agency
<b>HAZCHEM Code</b>	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
<b>HSNO</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>IARC</b>	International Agency for Research on Cancer

# PFL Surface Prep Lite

## Safety Data Sheet



<b>LEL</b>	Lower Explosive Limit
<b>LD<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>LC<sub>50</sub></b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>MSDS (SDS)</b>	Material Safety Data Sheet (or Safety Data Sheet)
<b>PES</b>	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).
<b>STEL</b>	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
<b>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UEL</b>	Upper Explosive Limit
<b>UN Number</b>	United Nations Number
<b>WES</b>	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

<b>Data</b>	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
<b>Controls</b>	EPA notices, <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> , Health and Safety at Work (Hazardous Substances) Regulations 2017, <a href="http://www.legislation.govt.nz">www.legislation.govt.nz</a>
<b>WES</b>	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .
<b>Other References:</b>	EU ECHA, ingredients SDS's, ChemIDplus

### Review

<b>Date</b>	<b>Reason for review</b>
Sept 2022	Not applicable – new SDS

### Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). Full formulation details were not available. This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email [info@datachem.co.nz](mailto:info@datachem.co.nz) or phone: +64 9 940 30 80.

