



### Section 1 – Identification of the substance/preparation and the company

**Product Name:** PureFlush  
**Company:** Donaghys Ltd  
**Address:** 16 Sheffield Crescent  
PO Box 20 449  
Christchurch  
**Telephone Number:** 0800 942 006  
**Recommended Use:** Acidic General Purpose Detergent Sanitiser

### Section 2 – Hazard Identification

**Hazard Classes:**

	6.1D	Harmful if swallowed
	8.2C	Causes severe burns and eye damage.
	8.3A	Causes serious eye damage
	9.3C	Harmful to terrestrial vertebrates

**EPA NZ Approval Code:** HSR002526      Cleaning products (corrosive) Group Standard

**Signal word:** DANGER

### Section 3 – Composition Information

Chemical Entity	CAS No.	Content [%]
Lactic Acid	50-21-5	10-30%
Citric Acid	77-92-9	10-20%

### Section 4 – First Aid Measures

**If Swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor/physician.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so, continue rinsing. Immediately call a POISON CENTRE or doctor / physician.

**If on skin:** Remove or take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a POISON CENTRE or doctor/physician

**If inhaled:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, immediately call a POISON CENTRE or doctor / physician.

**Advice to Doctor:** Treat symptomatically.  
**POISON CENTRE CONTACT: 0800 764 766 (National Poisons Information Centre)**

### Section 5 – Fire-fighting Measures

**Flashpoint:** Not applicable

**IN CASE OF EMERGENCY PHONE**  
**National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)**



<b>Combustion Products:</b>	Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). Other decomposition products include phosphorus oxides (Pox). Flammable hydrogen gas may be formed on contact with metals
<b>Flammability Limits:</b>	Not applicable
<b>Protective Equipment:</b>	Breathing apparatus, face shield or protective goggles, and neoprene rubber gloves and boots
<b>Extinguishing Media:</b>	Based on surrounding materials
<b>Special Fire Fighting Methods:</b>	None

### Section 6 – Accidental Release Measures

<b>Spills and Disposal:</b>	<b>MAJOR SPILLS</b> Slippery when spilt. Minor hazard. 1: Clear area of personnel. 2: Alert Fire Brigade and tell them location and nature of hazard. 3: Control personal contact by using protective equipment as required. 4: Prevent spillage from entering drains or waterways. 5: Contain spill with sand, earth or vermiculite. 6: Collect recoverable product into labelled containers for recycling. 7: Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal. 8: Wash area and prevent runoff into drains or waterways. 9: If contamination of drains or waterways occurs, advise emergency services. <b>Minor Spills:</b> Slippery when spilt. 1: Clean up all spills immediately. 2: Avoid breathing vapours and contact with skin and eyes. 3: Control personal contact by using protective equipment. 4: Contain and absorb spill with sand, earth, inert material or vermiculite. 5: Wipe up. 6: Place in a suitable labelled container for waste disposal. <b>Disposal:</b> 1: Recycle wherever possible or consult manufacturer for recycling options. 2: Consult State Land Waste Management Authority for disposal. 3: Treat and neutralise with slaked lime at an effluent treatment plant. 4: Recycle containers, otherwise dispose of in an authorised landfill.
<b>Protective Equipment:</b>	Wear neoprene gloves and boots, overalls and face/eye protection
<b>Environmental Precautions:</b>	Avoid entry into waterways or streams. Prevent washings from entering waterways.



### Section 7– Handling and Storage

**Storage:**

**SUITABLE CONTAINER**

Polyethylene or polypropylene container.  
Plastic carboy Plastic drum Polyliner drum  
Check all containers are clearly labelled and free from leaks.

**STORAGE INCOMPATIBILITY**

Segregate from alkalis, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulphides, carbonates.

**STORAGE REQUIREMENTS**

- 1: Store in original containers.
- 2: Keep containers securely sealed.
- 3: Store in a cool, dry, well-ventilated area.
- 4: Store away from incompatible materials and foodstuff containers.
- 5: Protect containers against physical damage and check regularly for leaks.
- 6: Observe storing and handling recommendations on label.

**Handling:**

Do not handle until all safety instructions have been read and understood.  
Wear eye / face protection.  
In case of inadequate ventilation wear respiratory protection.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.

### Section 8 – Exposure Controls/Personal Protection

**These precautions are suggested for conditions where the potential for exposure to the product exists. Emergency conditions may require additional precautions.**

**Exposure Limits:**

None assigned. Refer to individual constituents.

**Protective Equipment:**

Observe good work place practices and avoid contact with skin and eyes. Wear overalls, safety glasses and neoprene gloves when handling. Wear eye / face protection. In case of inadequate ventilation wear respiratory protection.

**Hygiene Precautions:**

Do not eat, drink or smoke when using this product.

**Engineering Controls:**

General exhaust is adequate under normal operating conditions.  
If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection.  
Provide adequate ventilation in warehouse or closed storage areas.

### Section 9 – Physical and Chemical Properties

**Appearance:**

Clear liquid

**Odour:**

Acidic odour

**Specific Gravity:**

1.1-1.4

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<b>pH:</b>	<3.5
<b>Vapour Pressure:</b>	N/A
<b>Flash Point:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Flammability Limits:</b>	N/A
<b>Solubility:</b>	Soluble in water

### Section 10 – Stability and Reactivity

<b>Stability:</b>	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Conditions to Avoid:</b>	None
<b>Materials to Avoid:</b>	Alkali (basic) chemicals, natural rubber, contact with some metals may produce hydrogen gas
<b>Hazardous Decomposition Products:</b>	None

### Section 11 – Toxicological Information

**No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.**

<b>Ingestion:</b>	The concentrate is highly corrosive, harmful if swallowed and is capable of causing burns to mouth, throat, oesophagus, with extreme discomfort, pain. Considered an unlikely route of entry in commercial/industrial environments. Small amounts or low dose rates are regarded as practically non-harmful. Ingestion of large quantity may cause severe abdominal pains, thirst, acidemia, difficult breathing, convulsions, collapse, shock and death. Although less hazardous than nitric and sulfuric acid, lactic acid has equal corrosive action upon ingestion.
<b>Inhalation:</b>	Not normally a hazard due to non-volatile nature of product. The vapour/mist is highly discomforting to the upper respiratory tract and may cause breathing difficulty. High concentrations cause inflamed airways and watery swelling of the lungs with oedema. Inhalation of vapour or mist may cause choking, coughing, headache, weakness and dizziness. Prolonged or repeated inhalation of vapour or mist may cause pulmonary oedema (lung damage) and cyanosis.
<b>Dermal:</b>	The concentrate is extremely discomforting to the skin and is capable of causing severe burns or skin reactions which may lead to dermatitis. The material may cause severe 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.
<b>Ocular:</b>	The concentrate is extremely corrosive to the eyes and is capable of causing severe damage with loss of sight. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.



**Chronic Effects:** Principal routes of exposure are by accidental skin and eye contact and by inhalation of vapours especially at higher temperatures. The product does not cause phosphorus poisoning. No human exposure data available. For this reason health effects described are based on experience with chemically related materials. As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

### Section 12 - Ecological Information

**EPA Classification:** 6.1D, 8.2C, 8.3A, 9.3C  
**Ecotoxicity:** May be harmful to aquatic life. Harmful to terrestrial invertebrates  
**Bioaccumulation:** Product does not contain bioaccumulative and ecologically persistent ingredients

### Section 13 – Disposal Considerations

**Product Disposal:** Preferably dispose of product by use. Otherwise dispose of product, packaging and waste at an approved landfill or equivalent facility in accordance with local, regional and national environmental regulations. Donaghys is a member of Agrecovery Container Recycling programme. For details on how to correctly prepare your container and collection sites please visit [www.agrecovery.co.nz](http://www.agrecovery.co.nz).

### Section 14 – Transport Information

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S (Lactic and citric acid)  
**UN Number:** 3265  
**DG Class:** 8  
**Subsidiary Risk Class:** None  
**Packing Group:** II  
**HAZCHEM Code:** 2X

### Section 15 – Regulatory Information

**EPA NZ Registration Code:** HSR002526  
See <http://www.epa.govt.nz> for approval conditions  
**NZFSA Approval Number:** H2158

### Section 16 – Other Information

The information in this MSDS is provided in good faith, but no warranty, expressed or implied is made. Contact Donaghys Ltd for more information.

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