



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

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

Section 2 – Hazard Identification

Hazard Classes:



6.9A Causes damage to organs
(respiratory system)
8.2B Causes severe skin burns and eye
damage
8.3A Causes serious eye damage
9.1B Toxic to aquatic life with long
lasting effects

EPA NZ Approval Code: HSR002526 Cleaning Products (Corrosive)
Group Standard

Section 3 – Composition Information

Chemical Entity	CAS No.	Content [%]
Phosphoric Acid	7664-38-2	10-30%
Sulfuric Acid	7664-93-9	10-30%
Polyquat PQ-2	25988-97-0	1-10%

Section 4 – First Aid Measures

If Swallowed: NEVER give anything by mouth to an unconscious person. Rinse mouth and give water or milk to drink. 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: Wash with plenty of soap and water. 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

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Flashpoint:	Not applicable
Combustion Products:	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
Flammability Limits:	Not applicable
Protective Equipment:	Breathing apparatus, face shield or protective goggles, and neoprene rubber gloves and boots
Extinguishing Media:	Based on surrounding materials
Special Fire Fighting Methods:	None

Section 6 – Accidental Release Measures

Spills and Disposal:	<p>MAJOR SPILLS 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.</p> <p>Minor Spills: 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.</p> <p>Disposal: 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.</p>
Protective Equipment:	Wear neoprene gloves and boots, overalls and face/eye protection
Environmental Precautions:	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, sulfides, 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.

<phosphoric acid>

TLV TWA: 1 mg/m³; STEL: 3 mg/m³

ES TWA: 1 mg/m³; STEL: 3 mg/m³

OES STEL: 2 mg/m³

IDLH Level: 1000 mg/m³

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:
Engineering Controls:**

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

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:

Orange/red liquid

Odour:

Acidic odour

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Specific Gravity:	1.2
pH:	N/A
Vapour Pressure:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Flammability Limits:	N/A
Solubility:	Soluble in water

Section 10 – Stability and Reactivity

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

Ingestion: 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, phosphoric acid has equal corrosive action upon ingestion. Death of an individual 19 days after ingestion of phosphoric acid was due to recurrent internal haemorrhage. Necrosis of the upper and lower digestive tract and pancreas was evident at autopsy.

Inhalation: 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.

Dermal: 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.

Ocular: 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: 9.1B
Ecotoxicity: May be harmful to aquatic life. Harmful to terrestrial invertebrates
Bioaccumulation: Product contains bioaccumulative and ecologically persistent ingredients

Section 13 – Disposal Considerations

Product Disposal: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 50 cm in a disposal pit specifically marked and set up for this purpose clear of waterways
Container Disposal: Triple rinse container and add residue to feed system. If circumstances, especially wind direction, permit the empty containers may be burned, otherwise crush and bury in a suitable landfill.

Section 14 – Transport Information

Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S
UN Number: 3264
DG Class: 8
Subsidiary Risk Class: None
Packing Group: II
HAZCHEM Code: 2X

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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.

EMERGENCY CONTACT No.: 0800 764 766 (National Poisons Information Centre)