



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

**Product Name:** Thermoflush  
**Company:** Donaghys Ltd  
**Address:** 16 Sheffield Crescent  
PO Box 20 449  
Christchurch  
**Telephone Number:** 0800 942 006  
**Recommended Use:** Acid milkstone and scale remover.

### Section 2 – Hazard Identification

**Hazard Classes:**



- 6.1D Harmful if swallowed
- 8.1A May be corrosive to metals
- 8.2C Causes serious skin burns and eye damage
- 8.3A Causes severe eye damage
- 9.1D May cause long lasting harmful effects to aquatic life
- 9.3C Harmful to terrestrial vertebrates

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

### Section 3 – Composition Information

Chemical Entity	CAS No.	Content [%]
Phosphoric Acid	7664-38-2	63%
Glycolic Acid	79-14-1	1-10%
Dodecyl Di (Amino Ethyl) Glycine	2372-82-9	1-10%

### Section 4 – First Aid Measures

**If Swallowed:** Do NOT induce vomiting. Rinse mouth. 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:** Take off all contaminated clothing immediately. Rinse skin and/or hair with water/shower. Wash contaminated clothing before re-use. If feeling unwell, contact a POISON CENTRE or doctor/physician.

**If inhaled:** 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)**

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



### Section 5 – Fire-fighting Measures

<b>Flashpoint:</b>	Not applicable
<b>Combustion Products:</b>	Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke and toxic fumes. Other decomposition products include phosphorus oxides (POx), chlorides and nitrogen oxides (NOx)
<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>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

<b>Storage:</b>	<b>SUITABLE CONTAINER</b> Polyethylene or polypropylene container. Plastic carboy Plastic drum Polyliner drum Check all containers are clearly labelled and free from leaks.
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### 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.

#### <phosphoric acid>

TLV TWA: 1 mg/m<sup>3</sup>; STEL: 3 mg/m<sup>3</sup>

ES TWA: 1 mg/m<sup>3</sup>; STEL: 3 mg/m<sup>3</sup>

OES STEL: 2 mg/m<sup>3</sup>

IDLH Level: 1000 mg/m<sup>3</sup>

### 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:** Purple liquid

**Odour:** Acidic odour

**Specific Gravity:** 1.2-1.5

**pH:** N/A

**Vapour Pressure:** N/A

**Flash Point:** N/A

### IN CASE OF EMERGENCY PHONE

National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)



**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  
**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 slightly toxic, harmful if swallowed and is capable of causing burns to mouth, throat, oesophagus, with extreme discomfort, pain and nausea. Breathing will be difficult and acidosis, convulsions and collapse may occur. Considered an unlikely route of entry in commercial/industrial environments.

**Inhalation:** The vapour/mist is slightly toxic and highly discomforting to the upper respiratory tract and may cause breathing difficulty. Exposure to high concentrations causes bronchitis and is characterised by the onset of haemorrhagic pulmonary oedema.

**Dermal:** The concentrate is highly discomforting to the skin and is capable of causing skin reactions which may lead to dermatitis and may cause skin sensitisation and burns if exposure is prolonged. Bare unprotected skin should not be exposed to this material. The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. Prolonged contact is unlikely, given the severity of response, but repeated exposures may produce severe ulceration.

**Ocular:** The concentrate is corrosive to the eyes and is capable of causing burns if exposure is prolonged. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

**Chronic Effects:** No significant health effects could be found. This material is not considered to be a carcinogen or mutagen and no reproductive effects have been identified.



### Section 12 - Ecological Information

<b>ERMA Classification:</b>	9.1D, 9.3C
<b>Ecotoxicity:</b>	May cause long lasting harmful effects to aquatic life. Harmful to terrestrial vertebrates.
<b>Bioaccumulation:</b>	Product contains bioaccumulative and ecologically persistent ingredients

### Section 13 – Disposal Considerations

<b>Product Disposal:</b>	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 <a href="http://www.agrecovery.co.nz">www.agrecovery.co.nz</a> .
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### Section 14 – Transport Information

<b>Proper Shipping Name:</b>	UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Phosphoric and Glycolic acid)
<b>UN Number:</b>	3264
<b>DG Class:</b>	8
<b>Subsidiary Risk Class:</b>	None
<b>Packing Group:</b>	III
<b>HAZCHEM Code:</b>	2X

### Section 15 – Regulatory Information

<b>EPA NZ Registration Code:</b>	HSR002526 See <a href="http://www.epa.govt.nz">http://www.epa.govt.nz</a> for approval conditions
<b>NZFSA Approval Number:</b>	H1030

### 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)**