

Safety Data Sheet

Revision Date: 24.06.2021

Print Date: Thursday, 08 July 2021

De-Scaler

Classification of Product:

Classified as **HAZARDOUS** according to criteria of the Globally Harmonised System of Classification and Labelling of Chemicals 3rd Revised Edition.

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

- a. Product name: **De-Scaler**
 - b. Other means of identification: Descaler, Descaler Liquid
 - c. Recommended use of the chemical
Removing built up residue and dirt from industrial dishwashers
 - d. Manufacturer details:
Dalcon Hygiene
36 Victoria St Smithfield
NSW 2164
Australia
PH: (02) 9604 1155
FAX: (02) 9604 9055
Email: admin@dalconhygiene.com.au
 - e. Emergency phone number:
Poisons information centre: 13 11 26
-

2. HAZARD(S) IDENTIFICATION

- a. Classification of the chemical (Class and category):

Classified as HAZARDOUS according to criteria of the Globally Harmonised System of Classification and Labelling of Chemicals 3rd Revised Edition.

Classification of the substance or mixture:

Serious eye damage/Irritation – Category 1

Skin Corrosion/Irritation – Category 1A

Acute Toxicity (Dermal) – Category 5

Acute Toxicity (Oral) – Category 4

b. Signal word: **DANGER**



c. **Hazard statement(s)**

H290: May be corrosive to metals

H302: Harmful if swallowed

H313: May be harmful in contact with skin

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

d. **Precautionary Statement(s)**

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.

Prevention:

P234: Keep only in original container.

P260: Do not breathe fumes/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/ shower.

P363: Wash contaminated clothing before reuse.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTER/doctor.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P321: Specific treatment (see section 4 – First Aid).

P390: Absorb spillage to prevent material damage

Storage:

P405 Store locked up. In a bunded area.

P406 Store in corrosive resistant container with a resistant inner liner

Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Poisons Schedule (SUSMP): S6 Poison

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS number	Proportion	Hazard Codes
Water	7732-18-5	<70%	-
Phosphoric Acid	7664-38-2	10-30%	H314, H318, H290, H302, H313
Sulphamic acid	5329-14-6	<1%	H319, H315, H412
Colouring	-	<5%	-
Non-hazardous chemicals	-	<5%	-

4. FIRST-AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If spilt on skin or hair, immediately drench with running water and remove contaminated clothing. Continue to wash skin and hair with plenty of water for at least 15 minutes. Seek immediate medical attention. Wash clothing before re-use. If burnt, treat as an acid burn.

Eye Contact:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to hospital or medical centre. Continue to wash with large amounts of water until medical help is available.

Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water if conscious. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result.

May cause cyanosis.

May target bone marrow, blood, liver. Via exposure routes of inhalation, ingestion or skin absorption

5. FIRE-FIGHTING MEASURES

Product is a non-flammable liquid

Hazchem or Emergency Action Code: 2R

a. **Suitable extinguishing equipment:**

Use fine water spray, alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).

b. **Specific hazards arising from the chemical:**

Corrosive substance.

Incompatible with strong oxidising agents, strong reducing agents, strong alkali, active powdered metals, fluorine, sulfur trioxide, phosphorous pentoxide, metals and sources of ignition.

This product will release hydrogen on contact with metals which may cause an explosion in the air.

Reacts with water to generate heat and form phosphoric acid. This reaction is not violent.

Emits toxic fumes under fire conditions. It will produce phosphorous gas at high temperatures. It is corrosive.

Hazardous decomposition products include phosphine, oxides of phosphorus, hydrogen gas.

c. **Special protective equipment and precautions for fire fighters:**

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing. Move containers from area if safe to do so.

6. ACCIDENTAL RELEASE MEASURES

a. **Emergency procedures/Environmental precautions:**

Clear area of all unprotected personnel. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Prevent leakage or spillage into the environment. Do not let product enter drains.

Discharge into the environment must be avoided.

Shut off all possible sources of ignition.

b. **Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**

Slippery when spilt. Avoid accidents, clean up immediately.

Wear protective equipment to prevent skin and eye contact and breathing in vapours.

Work up wind or increase ventilation.

Contain - prevent run off into drains and waterways.

Neutralise spilt product with lime or soda. Soak up using absorbent material such as sand or soil. Transfer material to a suitable, clean, labelled container for disposal.
Wash spill site with large amounts of water.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

a. **Precautions for safe handling**

Avoid skin and eye contact and breathing in vapour, mists and aerosols.
Use in a well ventilated area.
Ensure an eye bath and safety shower are available
Keep out of reach of children.
Avoid eating, drinking or, smoking when using this chemical.
Wash hands after use.
Avoid prolonged or repeated exposure.
Remove contaminated clothing and protective equipment after using chemicals and before entering eating areas.
Wash contaminated clothing and protect equipment before re-use.

b. **Conditions for safe storage, including incompatibilities.**

Store in cool place and out of direct sunlight.
Store in a bunded area.
Store away from foodstuffs.
Store away from incompatible materials described in Section 10.
Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

a. **General:**

No value assigned for this specific material by Safe Work Australia.
However, Workplace Exposure Standard(s) for constituent(s):
Phosphoric acid: TWA = 1mg/m³ STEL = 3mg/m³

b. **Engineering controls:**

Handle in accordance with good industrial hygiene and safety practise. Wash hands before and after use.
A ventilation system is recommended to ensure adequate ventilation to maintain air concentrations below Workplace Exposure Standards.
Keep containers closed when not in use

c. **Individual Protection measures**

Eye/face protection:

Face shield and safety glasses. Use equipment for eye protection tested and approved

under appropriate government standards

Skin protection:

Wear gloves when handling products. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Gloves must be rubber or neoprene impervious gloves.

Wear chemical resistant coveralls and safety footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

- a. Physical state: Liquid
- b. Colour: Clear
- c. Odour: Odourless
- d. pH: 1-2
- e. Melting point/freezing point: <0°C
- f. Initial boiling point and boiling range: 101°C
- g. Flammability: not applicable
- h. Upper/lower flammability or explosive limits: Not applicable
- i. Vapour pressure (20°C): Not available
- j. Relative density: Not available
- k. Solubility: Miscible in Water
- l. Auto-ignition temperature: Not available
- m. Specific Gravity: 1.2 @ 20°C
- n. Density: 1.11g/cm³

10. STABILITY AND REACTIVITY

- a. Chemical stability:
Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Hygroscopic: absorbs moisture from the air.
- b. Possibility of Hazardous reactions:
Reacts with ammonium salts, evolving ammonia gas.
Reacts readily with reducing sugars to produce carbon monoxide.
- c. Conditions to avoid:
Avoid exposure to water or moisture.
Avoid contact with other chemicals.
Avoid excessive heat or direct sunlight.
- d. Incompatible materials:
Incompatible strong oxidising agents, strong reducing agents, strong alkali, active powdered metals, Fluorine, sulfur trioxide, phosphorus pentoxide, metals, and sources of ignition.
Hazardous decomposition products:
This product will release hydrogen on contact with metals which may cause an explosion

in the air.

Reacts with water to generate heat and form phosphoric acid. This reaction is not violent.

Emits toxic fumes under fire conditions. It will produce phosphorous gas at high temperatures. It is corrosive.

Hazardous decomposition products include phosphine, oxides of phosphorus, hydrogen gas.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

General:

No LD50 data available for the product.

For the constituent PHOSPHORIC ACID: Oral LD50 (rat): 1530mg/kg, Dermal (rabbit): 2740mg/kg

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain, chest pain, shortness of breath, seizures, death, and chemical burns to the mouth and gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

Inhalation: Breathing in mists or aerosols may produce respiratory irritation, shortness of breath, and fluid in lungs. Delayed (up to 48 hours) fluid build-up in the lungs may occur.

12. ECOLOGICAL INFORMATION

- a. Ecotoxicity: Avoid contaminating waterways
- b. Persistence and degradability: This material is biodegradable
- c. Aquatic Toxicity: No data available

13. DISPOSAL CONSIDERATIONS

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Decontamination and destruction of containers should be considered.

Do not allow waste to enter waterways.

14. TRANSPORT INFORMATION

Contains materials classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; **DANGEROUS GOODS**.



For the constituent PHOSPHORIC ACID:

- a. Proper shipping name or technical name: PHOSPHORIC ACID, SOLUTION
- b. Transport hazard class: 8 Corrosive Substances
- c. Subsidiary risks: No Data available
- d. EPG: 37 Toxic and/or corrosive substances Non-combustible
- e. UN Number: 1805
- f. Hazchem: 2R
- g. Packing group: III

Contains materials classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; **DANGEROUS GOODS**.

- a. Proper shipping name or technical name: PHOSPHORIC ACID, SOLUTION
- b. Transport hazard class: 8 Corrosive Substances
- c. Subsidiary risks: No Data available
- d. UN Number: 1805
- e. Hazchem: 2R
- f. Packing group: III
- g. EMS: FA,SB
- h. Marine Pollutant: no

Contains materials classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; **DANGEROUS GOODS**.

- a. Proper shipping name or technical name: PHOSPHORIC ACID, SOLUTION
- b. Transport hazard class: 8 Corrosive Substances
- c. Subsidiary risks: No Data available
- d. UN Number: 1805
- e. Hazchem: 2R
- f. Packing group: III
- g. Special provision: No Data Available.

15. REGULATORY INFORMATION

This Material is hazardous according to Safe Work Australia; **HAZARDOUS SUBSTANCE**

Classification of the substance or mixture:

Serious eye damage/Irritation – Category 1
Skin Corrosion/Irritation – Category 1A
Acute Toxicity (Dermal) – Category 5
Acute Toxicity (Oral) – Category 4

Hazard Statement(s):

H290: May be corrosive to metals
H302: Harmful if swallowed
H313: May be harmful in contact with skin
H314: Causes severe skin burns and eye damage
H318: Causes serious eye damage

Poisons Schedule (SUSMP): Schedule 6

16. ANY OTHER RELEVANT INFORMATION

This Safety Data Sheet (SDS) has been prepared by Dalcon Hygiene

Reason(s) for Issue:

- Alignment to GHS requirements

This SDS summarises to the best of our knowledge at the date of issue, the chemical health and safety hazards of the material and provides general guidelines on how to safely handle the material. Dalcon Hygiene cannot anticipate or control the conditions under which the product may be used, stored and transported, therefore, each user must, prior to usage, assess and control the possible risks.

If clarification or further information is required, the user should contact Dalcon Hygiene at the contact details in section 1d.

By using this product, the user agrees that they have read and understood this SDS, and, knowing the risks associated with the product, wish to use the product.