



## Section 1: Identification of the Material and Supplier

**Product Name:** Acid Klenz

**Other Names:** Phosphoric acid solution.

**Proper shipping name (ADG Code):** Phosphoric acid 54 %

**Recommended use:** As an acid dairy detergent for milkstone removal.  
Use as directed on the product label.

**Supplier:** DASCO Pty. Ltd.,  
ABN: 14 004 581 113  
24 - 26 Helen Street, HEIDELBERG HEIGHTS VIC 3081  
Tel: (03) 9459 7004 (business hours)  
Fax: (03) 9459 9200

**Emergency Phone Numbers:**

Transport/Fire Emergency: 000 (Emergency services)  
Medical Emergency: 131126 (Poisons Information Centre)

## Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Dangerous goods.

**Risk Phrases:** R: 34 Causes burns.

**Safety Phrases:** S: 1/2 Keep locked up and out of the reach of children.  
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## Section 3: Composition/Information on Ingredients

**Ingredients:**

Orthophosphoric acid	[7664-38-2]	30 - 60 %
Quaternary ammonium compound		< 10 %
Surfactant		< 10 %
Other ingredients deemed not to be hazardous		< 10 %
Water	[7732-18-5]	to 100.00 %

## Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Center or a doctor, or for at least 15 minutes.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Inhaled: Remove from exposure.

### First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

### Advice to Doctor:

Product is a dilute solution of a surfactant and a disinfectant in phosphoric acid solution. Causes burns. Risk of serious eye damage. If swallowed, vomiting should not have been induced because of the risk of aspiration of acid froth into the lungs. Contact Poisons Information Centre.

### Aggravated medical conditions:

No data found.

## Section 5: Fire Fighting Measures

HAZCHEM Code: 2 R

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Water vapour, oxides of phosphorus, oxides of carbon, oxides of nitrogen, hydrogen chloride.

Protective Equipment: Full protective clothing including breathing apparatus and protective gloves.

## Section 6: Accidental Release Measures

### **Emergency Procedures:**

Contain.

### **For large spills:**

Contain spillage using sand or earth. Transfer both liquids and solids to suitable container. Treat residues as for small spillages.

### **For small spills:**

Spillages may be neutralised by the liberal application of soda ash or crushed limestone.

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise absorb on inert absorbent, transfer to suitable container and arrange removal by disposals company.

## Section 7: Handling and Storage

### **Precautions for safe handling:**

Avoid contact with skin and eyes.

Keep away from alkalis.

### **Conditions for safe storage:**

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bonded dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from alkalis, including carbonates and bicarbonates. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

### **Incompatibles:**

Alkalis, active metals.

## Section 8: Exposure Controls/Personal Protection

### National Exposure Standards:

**ES-TWA:** Phosphoric acid 1 mg/m<sup>3</sup>

**ES-STEL:** Phosphoric acid 3 mg/m<sup>3</sup>

**ES-PEAK:** None assigned.

**Notations:** None.

**Biological Limit Values:** No data found.

### Engineering Controls:

Avoid using active metals (such as aluminium, zinc) as materials of construction.

Ensure adequate ventilation (same as outdoors) when using.

If handling industrial quantities, or if vapour/aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible, and at least below the TLV.

### Personal Protective Equipment:

Avoid contact with skin and eyes. Do not breathe aerosols.

Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

#### Normal Use:

Eye/face protection

Gloves, rubber or plastic.

#### Industrial Quantities:

Face shield or safety glasses

Gloves, rubber or plastic

Plastic apron, sleeves and boots

Impervious overalls.

## Section 9: Physical and Chemical Properties

**Appearance:** Clear, pink, slightly viscous, frothing liquid.

**Odour:** Almost odourless.

**pH:** < 2. Very acidic.

**Vapour Pressure:** No data.

**Vapour Density:** No data.

**Boiling Point:** > 100 °C

**Melting Point:** No data.

**Volatiles:** About 42 % [water]

**Volatile Organic Compounds (VOC):** < 1 %

**Evaporation Rate:** No data.

**Solubilities:** Miscible with water in all proportions.

**Specific Gravity/Density:** About 1.5 g/mL @ 20 °C

**Flash Point:** None.

**Flammable Limits:** None.

**Dust Explosion:** Not applicable.

**Auto-ignition Temperature:** No data.

### Other Information:

Acidic mixture. Will react vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant. Corrosive to many metals. Contact with active metals (such as aluminium or zinc) may generate hydrogen, a flammable gas. Slippery when spilled.

## Section 10: Stability and Reactivity

- Chemical Stability:** Stable under normal conditions.
- Conditions to Avoid:** Incompatible materials.
- Incompatible Materials:** Metals, alkalis.
- Hazardous Decomposition Products:** Oxides of phosphorus, oxides of nitrogen, hydrogen chloride.
- Hazardous Reactions:** Will react vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide. Contact with active metals may generate hydrogen.

## Section 11: Toxicological Information

### Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

- Acute:**
- Swallowed:** Harmful if swallowed; may be fatal. May cause pain in the throat and stomach, abdominal cramps a burning sensation, nausea, vomiting and intense thirst. May cause burns to the stomach and intestines, may cause haemorrhaging of the digestive tract. May cause corrosion and permanent tissue destruction of the oesophagus and digestive tract. Large doses may cause shock, clammy skin, weak and rapid pulse, shallow breathing, weakness, confusion, reduced urine output, loss of consciousness and death.
  - Skin:** Severe skin irritant, may cause redness, pain, blisters and burns. Mild exposure may cause skin rash. Severe exposure may cause cyanosis or pale skin.
  - Eyes:** Severe eye irritant. May cause redness, pain, blurred vision, severe deep burns. May cause chemical conjunctivitis and corneal damage.
  - Inhaled:** Inhalation of aerosols or concentrated vapours may cause a burning sensation on the chest, laboured breathing, shortness of breath, sore throat and loss of consciousness. May cause pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.
- Chronic:** Repeated skin contact may lead to irritation and burns. Exposure to phosphoric acid may affect the blood, liver and bone marrow.
- LD50:** Phosphoric acid 1,530 mg/kg oral, rat.  
2,740 mg/kg skin, rabbit.
- LDLo:** Phosphoric acid 220 mg/kg  
unreported route - man.

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment.
<b>Persistence and degradability:</b>	The surfactant used in the product is not considered to be readily biodegradable.
<b>Mobility:</b>	Readily transported by water.
<b>Environmental Fate:</b>	No data.
<b>Bioaccumulative potential:</b>	No data.
<b>Other adverse environmental effects:</b>	Contains phosphoric acid. Phosphates in natural waters may contribute to the development of algal blooms.

## Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

**Disposal methods and containers:**

Avoid disposal to drains, natural waters or the environment.  
Do not use metal containers.

**Special precautions for landfill or incineration:**

Not suitable for incineration.  
May not be suitable for some landfill sites.

## Section 14: Transport Information

<b>UN Number:</b>	UN 1805
<b>UN Proper shipping name:</b>	Phosphoric acid 54 %
<b>Class and subsidiary risk:</b>	8 Corrosive.
<b>Packaging group:</b>	III
<b>Special precautions for user:</b>	Do not store or transport with other dangerous goods of classes 1, 4.3, 5.1, 5.2, 6 (cyanides), 7, 8 (alkalis), foodstuffs or foodstuff empties. Contain spillages.
<b>HAZCHEM Code:</b>	2 R
<b>Material for export:</b>	Regulated. Refer to <b>IMO/IMDG</b> and <b>IATA/ICAO</b> .

## Section 15: Regulatory Information

**Poisons (SUSDP):** Schedule 6 Phosphoric acid > 35 %

**Dangerous Goods:** Yes. UN 1805 8/III 2 R.

**Carcinogen:** **Australia** **IARC** **NTP** **RTECS**  
No. No. No. No.

**Agricultural and Veterinary Chemicals Act:**

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (**APVMA**).

**Australian Inventory of Chemical Substances (AICS):** Listed.

**Other National/International Regulations:** No data found.

## Section 16: Other information

**Date of MSDS update:** September 2009  
Complete review and re-write of all sections.

**Abbreviations:**

NOHSC - National Occupational Health and Safety Commission.  
ACGIH - American Conference of Governmental Industrial Hygienists.  
IARC - International Agency for Research on Cancer (France).  
RTECS - Registry of Toxic Effects of Chemical Substances.

**Literature references:**

**Available Sources of Data:**

*National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.*  
*Australian Dangerous Goods Code.*  
*Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.*  
*Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.*  
*List of Designated Hazardous Substances [10005] - NOHSC.*  
*Merck Index - Merck Inc.*  
*Sax's Dangerous Properties of Industrial Materials - Lewis.*  
*Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.*  
*Handbook of Reactive Chemical Hazards - Bretherick.*  
*Hawley's Condensed Chemical Dictionary - Wiley Interscience.*  
*AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.*