



## Section 1: Identification of the Material and Supplier

**Product Name:** Dairox

**Other Names:** Mixture of inorganic salts and surfactants.

**Proper shipping name (ADG Code):** None assigned.

**Recommended use:** As a dairy detergent.  
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.

Non-dangerous goods.

**Risk Phrases:** R: 36 Irritating to eyes.

**Safety Phrases:** S: 2 Keep out of the reach of children.  
S: 22 Do not breathe dust.  
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## Section 3: Composition/Information on Ingredients

**Ingredients:**

Sodium carbonate anhydrous	[497-19-8]	> 60 %
Mixed surfactants		< 10 %
Other ingredients deemed not to be hazardous		to 100 %

## Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131 126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

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

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.

Inhaled: Remove from exposure.

### First Aid facilities:

Recommended: Eye wash. Hand wash basin.

### Advice to Doctor:

Product is a mixture of alkaline salts and surfactants. Irritating to eyes. If swallowed, vomiting should not have been induced because of risk of aspiration of froth into the lungs. Contact Poisons Information Centre.

### Aggravated medical conditions:

Pre-existing skin disorders.

## Section 5: Fire Fighting Measures

HAZCHEM Code: None assigned.

Evacuate: No.

Extinguishant: Water.

Risk of violent reaction or explosion: No.

Products of combustion: Oxides of phosphorus, oxides of carbon, oxides of sulphur.

Protective Equipment: Breathing apparatus and protective gloves for fire only.

## 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:

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.  
Do not breathe dust.  
Keep away from acids.

### Conditions for safe storage:

Store in a cool, dry, well ventilated place, out of reach of children. Store in original container. Keep container tightly closed and dry. Keep away from acids. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

### Incompatibles:

Acids, oxidising agents.

## Section 8: Exposure Controls/Personal Protection

### National Exposure Standards:

ES-TWA: None assigned.

ES-STEL: None assigned.

ES-PEAK: None assigned.

Notations: None.

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

### Engineering Controls:

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.

### Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing dust. 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:

Dust mask  
Face shield or safety glasses  
Gloves, rubber or plastic  
Plastic apron, sleeves and boots  
Impervious overalls.

## Section 9: Physical and Chemical Properties

Appearance: White, slightly sticky, granular powder.  
Odour: Slight smell of detergent.  
pH: About 11.5  
Vapour Pressure: No data.  
Vapour Density: No data.  
Boiling Point: No data.  
Melting Point: No data.  
Volatiles: < 1 %  
Volatile Organic Compounds (VOC): < 1 %  
Evaporation Rate: No data.  
Solubilities: Soluble in water.  
Specific Gravity/Density: No data.  
Flash Point: None.  
Flammable Limits: None.  
Dust Explosion: Will not occur.  
Auto-ignition Temperature: No data.

### Other Information:

Alkaline mixture. Will react vigorously or violently with acids, generating carbon dioxide, a simple asphyxiant. Slightly hygroscopic, will absorb moisture from the air. May react with strong oxidising agents. Spillages will be slippery when wet.

## Section 10: Stability and Reactivity

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** Incompatible materials, moist air.

**Incompatible Materials:** Acids, oxidising agents.

**Hazardous Decomposition Products:** Oxides of phosphorus, oxides of sulphur.

**Hazardous Reactions:** May react vigorously or violently with acids, generating carbon dioxide.

## Section 11: Toxicological Information

### Health Effects:

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

<b>Acute:</b>	<b>Swallowed:</b>	Large doses may be corrosive to the gastrointestinal tract. Symptoms may include severe abdominal pain, nausea, vomiting, diarrhoea, collapse and death. Smaller doses may cause gastric upset, vomiting, diarrhoea and electrolyte disturbances. An aspiration risk.
	<b>Skin:</b>	Contact with the powder may cause redness, irritation and blisters. Concentrated aqueous solutions may cause severe irritation or burns. Will have a degreasing effect on the skin.
	<b>Eyes:</b>	May be corrosive to eyes, causing conjunctival oedema (swelling due to fluid build-up) and corneal destruction. Risk of more serious injury increases if eyes are kept tightly shut.
	<b>Inhaled:</b>	Dust inhaled will cause irritation of the respiratory system. Symptoms may include coughing, wheezing and difficulty breathing, burning pain in the nose and throat, possible pulmonary oedema (build-up of fluid in the lungs). Onset of symptoms may be delayed. Aspiration of froth into the lungs during swallowing or vomiting may lead to chemical pneumonitis (inflammation of lung tissues) and pulmonary oedema. Onset of symptoms may be delayed.
<b>Chronic:</b>		Repeated skin contact may lead to irritation and possible burns. Excessive inhalation exposure may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, bronchitis and chest pains.
<b>LD50:</b>	Sodium carbonate anhydrous	4,090 mg/kg oral, rat. 6,600 mg/kg oral, mouse.
<b>LC50:</b>	Sodium carbonate anhydrous	2,300 mg/m <sup>3</sup> /2 hours, rat. 1,200 mg/m <sup>3</sup> /2 hours, mouse.

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Harmful to aquatic organisms.
<b>Persistence and degradability:</b>	The surfactants used in this product are considered to be either readily biodegradable or partially 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 surfactants. Local concentrations may be harmful to aquatic organisms, including fish. Contains a moderate proportion of phosphate. May contribute to the development of algal blooms in natural waters.

## 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 natural waters or the environment.

**Special precautions for landfill or incineration:**

Unsuitable for incineration.

May not be suitable for some landfill sites.

## Section 14: Transport Information

<b>UN Number:</b>	None assigned.
<b>UN Proper shipping name:</b>	None assigned.
<b>Class and subsidiary risk:</b>	None assigned.
<b>Packaging group:</b>	None assigned.
<b>Special precautions for user:</b>	Contain spillages.
<b>HAZCHEM Code:</b>	None assigned.
<b>Material for export:</b>	Not regulated.

## Section 15: Regulatory Information

**Poisons (SUSDP):** Schedule 5  
*Alkaline salts with pH > 11.5*

**Dangerous Goods:** No.

<b>Carcinogen:</b>	<b>Australia</b>	<b>IARC</b>	<b>NTP</b>	<b>RTECS</b>
	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.  
MAK - Maximum workplace concentration - Germany,  
(*maximale Arbeitsplatzkonzentration*)  
IARC - International Agency for Research on Cancer (France).  
NTP - National Toxicology Program (USA).  
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.*