



## Section 1: Identification of the Material and Supplier

**Product Name:** Cow Power Alkali Detergent

**Other Names:** Alkaline salts with a surfactant.

**Proper shipping name (ADG Code):** Disodium trioxosilicate mixture.

**Recommended use:** As an alkali 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.**

**Dangerous goods.**

**Risk Phrases:** R: 34 Causes burns.  
R: 37 Irritating to respiratory system.

**Safety Phrases:** S: 1/2 Keep locked up and out of the reach of children.  
S: 13 Keep away from food, drink and animal feeding stuffs.  
S: 22 Do not breathe dust.  
S: 24/25 Avoid contact with skin and eyes.  
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S: 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
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:**

Sodium carbonate anhydrous	[497-19-8]	> 60 %
Sodium metasilicate pentahydrate	[10213-79-3]	10 - 30 %
Surfactant		< 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, rest and keep warm. Seek medical advice.

**First Aid facilities:**

Mandatory: Eye wash. Hand wash basin.

**Advice to Doctor:**

Product is a mixture of alkaline salts containing a moderate proportion of sodium metasilicate and a low proportion of a surfactant. Corrosive irritant. May cause burns to moist tissues. Contact Poisons Information Centre.

**Aggravated medical conditions:**

No data found.

### Section 5: Fire Fighting Measures

HAZCHEM Code: 2 X

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Carbon dioxide, oxides of phosphorus.

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:**

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise mix with 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 acids.

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

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

### **Incompatibles:**

Acids, strong oxidising agents.

## Section 8: Exposure Controls/Personal Protection

### National Exposure Standards:

<b>ES-TWA:</b>	None assigned, but see: Nuisance dusts	10 mg/m <sup>3</sup>
<b>ES-STEL:</b>	None assigned.	
<b>ES-PEAK:</b>	None assigned.	
<b>Notations:</b>	None.	

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

### Engineering Controls:

Avoid using aluminium, tin, zinc or galvanised iron 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. Avoid breathing dusts.  
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, granular powder.  
Odour: Mild detergent odour.  
pH: 11.5 - 13.5.  
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 happen.  
Auto-ignition Temperature: No data.

### Other Information:

Highly alkaline mixture. Will react vigorously or violently with acids, generating carbon dioxide, a simple asphyxiant. Slightly hygroscopic, will absorb moisture from the air. In the presence of moisture, may react with active metals (such as aluminium, tin and zinc), generating hydrogen, a flammable gas. May react with strong oxidising agents. Slippery when spilled.

## Section 10: Stability and Reactivity

**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Incompatible materials, moist air.  
**Incompatible Materials:** Acids, strong oxidising agents, active metals.  
**Hazardous Decomposition Products:** Oxides of phosphorus.  
**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>	Corrosive to moist tissues. May cause severe irritation and abdominal pain, vomiting, diarrhoea, ulceration and/or bleeding from the stomach, duodenum and small intestine. May cause electrolyte disturbances. Possible risk of shock and collapse.
	<b>Skin:</b>	Severe skin irritant, particularly when wet. May cause blisters and skin burns.
	<b>Eyes:</b>	Corrosive. May cause severe irritation, conjunctival oedema, corneal damage and possible eye burns. Risk of serious eye damage.
	<b>Inhaled:</b>	Dust will irritate the respiratory system. May cause a burning pain in the nose and throat, coughing, wheezing and shortness of breath. Over-exposure may cause delayed onset pulmonary oedema (build-up of fluid in the lungs).
<b>Chronic:</b>		Repeated skin contact may cause irritation, dermatitic effects and skin burns. Inhalation over-exposure may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pains, bronchitis.
<b>LD50:</b>	Sodium carbonate anhydrous	4,090 mg/kg oral, rat. 6,600 mg/kg oral, mouse.
	Sodium metasilicate pentahydrate	1,153 mg/kg oral, rat. 770 mg/kg oral, mouse.
<b>LC50:</b>	Sodium carbonate anhydrous	2,300 mg/m <sup>3</sup> /2 hours, rat.
<b>TDL0:</b>	Sodium metasilicate pentahydrate	1,000 µL/kg oral, man - <i>kidney damage, blood in the urine, nausea or vomiting.</i>

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Harmful to aquatic organisms.
<b>Persistence and degradability:</b>	The surfactant used in this product is considered to be 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 phosphate. May contribute to the development of algal blooms in natural waters. Contains surfactant. Local concentrations may be harmful to aquatic organisms, including fish.

## 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.  
Do not use metal containers.

**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>	UN 3253
<b>UN Proper shipping name:</b>	Disodium trioxosilicate mixture.
<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 dangerous goods of classes 1, 4.3, 5.1, 5.2, 7, 8 (acids), foodstuffs or foodstuff empties. Contain spillages.
<b>HAZCHEM Code:</b>	2 X
<b>Material for export:</b>	Regulated. Refer to <b>IMO\IMDG</b> and <b>IATA\ICAO</b> .

## Section 15: Regulatory Information

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

**Dangerous Goods:** Yes. UN 3253 8/III 2 X.

<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.*