



## Section 1: Identification of the Material and Supplier

**Product Name:** Supa Klenz

**Other Names:** Inorganic salts and sodium hydroxide mixture.

**Proper shipping name (ADG Code):**

Corrosive solid, basic, inorganic, n.o.s.  
(sodium hydroxide, disodium trioxosilicate)

**Recommended use:** As a heavy duty circulation cleaner for dairies.  
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: 35 Causes severe burns.

**Safety Phrases:** S: 1/2 Keep locked up and 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.  
S: 37/39 Wear suitable 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 hydroxide	[1310-73-2]	30 - 60 %
Sodium carbonate anhydrous	[497-19-8]	10 - 30 %
Sodium metasilicate pentahydrate	[10213-79-3]	10 - 30 %
Other ingredients deemed not to be hazardous		< 10 %
Available chlorine	[7782-50-5]	1.24 %

## 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:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

### Advice to Doctor:

Product is a mixture of inorganic salts containing a high proportion of sodium hydroxide. Corrosive to living tissues. Causes severe burns. May cause serious eye damage. If swallowed, may cause perforations in stomach and intestines; gastric lavage may be contraindicated. May cause swelling of the larynx with risk of suffocation. Inhaled dust may cause delayed onset pulmonary oedema. Contact Poisons Information Centre.

### Aggravated medical conditions:

No data found.

## Section 5: Fire Fighting Measures

HAZCHEM Code: 2 X

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Oxides of phosphorus, oxides of nitrogen, oxides of carbon, chlorine, 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:

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, ammonium compounds, active metals such as aluminium, tin, zinc.

Do not mix with hot water.

### Conditions for safe storage:

Store in a cool, 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, ammonium salts, active metals, organic halides, nitro compounds, metal salts. Protect from physical damage. Clean up all spills promptly; avoid secondary accidents.

### Incompatibles:

Acids and acid salts, active metals (such as aluminium, tin, and zinc), ammonium compounds, organic halides, flammable liquids, nitro compounds, metal salts, wood and wood products.

## Section 8: Exposure Controls/Personal Protection

### National Exposure Standards:

**ES-TWA:** Sodium hydroxide 2 mg/m<sup>3</sup>

Chlorine 1 ppm, 3 mg/m<sup>3</sup>

**ES-STEL:** None assigned.

**ES-PEAK:** Sodium hydroxide 2 mg/m<sup>3</sup>

Chlorine 1 ppm, 3 mg/m<sup>3</sup>

**Notations:** None.

*[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.*

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

### Engineering Controls:

Do not use aluminium, tin, zinc, galvanised iron, wood or wood products as materials of construction.

Ensure adequate ventilation (same as outdoors) when using.

If handling industrial quantities, or if dust/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 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:

Face shield or safety glasses

Gloves, rubber or plastic

Plastic apron, sleeves and boots

Impervious overalls.

## Section 9: Physical and Chemical Properties

Appearance: Buff coloured, granular powder.  
Odour: Almost odourless.  
pH: 14 Very alkaline.  
Vapour Pressure: None.  
Vapour Density: No data.  
Boiling Point: No data.  
Melting Point: No data.  
Volatiles: About 1.24 % as available chlorine.  
Volatile Organic Compounds (VOC): Nil.  
Evaporation Rate: Not applicable.  
Solubilities: Soluble in water with generation of heat.  
Specific Gravity/Density: No data.  
Flash Point: None.  
Flammable Limits: None.  
Dust Explosion: Will not occur.  
Auto-ignition Temperature: No data.

### Other Information:

Highly alkaline. Will react violently with acids generating carbon dioxide, a simple asphyxiant, and chlorine, a toxic gas. Contact with ammonium compounds may generate ammonia, a toxic gas. Corrosive to active metals, such as aluminium, tin, zinc and galvanised iron, generating hydrogen, a flammable gas. Hygroscopic, will absorb moisture from the air. Will absorb carbon dioxide from the air. May form shock-sensitive products with nitro compounds. Incompatible with flammable liquids, organic halides. Will attack wood and wood products. May attack glass on prolonged contact. Spillages will be slippery, especially when wet.

## Section 10: Stability and Reactivity

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

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

**Incompatible Materials:** Active metals, acids, ammonium compounds, nitro compounds, organic halides, metal salts, wood and wood products, flammable liquids.

**Hazardous Decomposition Products:** Chlorine, oxides of phosphorus, oxides of nitrogen, oxides of carbon.

**Hazardous Reactions:** Will react violently with acids, generating chlorine and carbon dioxide. Will corrode active metals, generating hydrogen. Contact with ammonium compounds may generate ammonia. May form shock-sensitive products with nitro compounds. May boil violently if mixed with hot water.

## 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. May cause burns to mouth, throat, stomach and intestines. May cause holes in the stomach and intestines. May cause swelling of the larynx and subsequent suffocation. Other symptoms may include nausea, vomiting, abdominal pain, diarrhoea (occasionally bloody), fall in blood pressure, heart failure, coma and death. Damage may not be noticed until days after contact, but me still prove fatal. If not immediately fatal, may cause constrictive scarring.
	<b>Skin:</b>	Causes severe, deep burns. Contact with dust or aerosols may cause small burns. Symptoms may include redness, pain and serious skin burns.
	<b>Eyes:</b>	Causes severe burns. May cause serious eye damage. Rapidly causes severe damage to moist tissues. May cause redness, pain, blurred vision, and permanent impairment of sight.
	<b>Inhaled:</b>	Dust and aerosols can cause damage to the upper respiratory system and lungs. Effects may range from mild irritation of mucous membranes to severe pneumonitis (irritation of lung tissues). May cause cough, a burning sensation, laboured breathing, sneezing, sore throat and runny nose. May cause pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed by several hours.
<b>Chronic:</b>		Repeated skin contact may lead to irritation and burns. The sites of internal scarring have been associated with the later development of stomach cancer. Chronic exposure to low levels of chlorine may lead to chloracne and erosion of the teeth.
<b>LD50:</b>	Sodium hydroxide	No data found.
	Sodium carbonate anhydrous	4,090 mg/kg oral, rat.
	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 hrs, mouse.
<b>LDLo:</b>	Sodium hydroxide	500 mg/kg oral, rabbit.
	Sodium metasilicate pentahydrate	250 mg/kg oral, dog.

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Harmful to aquatic organisms.
<b>Persistence and degradability:</b>	No data.
<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 a small proportion of available chlorine.

## 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:**

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

## Section 14: Transport Information

<b>UN Number:</b>	UN 3262
<b>UN Proper shipping name:</b>	Corrosive solid, basic, inorganic, n.o.s. (sodium hydroxide, disodium trioxosilicate)
<b>Class and subsidiary risk:</b>	8 Corrosive.
<b>Packaging group:</b>	II
<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 and 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):** S6 Sodium hydroxide > 5 %

**Dangerous Goods:** Yes. UN 3262 8/II 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.*