Safety Data Sheet
according to WHS Regulations

Printing date 02.09.2019 Revision: 02.09.2019

1 Identification

Product Name: SUPA KLENZ

Other Means of Identification: Mixture
Other Name: Inorganic salts and sodium hydroxide mixture

Recommended Use of the Chemical and Restriction on Use: Heavy duty circulation cleaner for dairies

Details of Manufacturer or Importer:
DASCO Pty Ltd
24 - 26 Helen Street
Heidelberg Heights VIC 3081

Phone Number: 03 9459 7004

Emergency telephone number: National Poison Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).


corrosion

Corrosive To Metals 1	H290	May be corrosive to metals.
Skin Corrosion/Irritation 1A	H314	Causes severe skin burns and eye damage.
Serious Eye Damage/Irritation 1	H318	Causes serious eye damage.

STOT SE 3	H335	May cause respiratory irritation.
Aquatic Acute 3	H402	Harmful to aquatic life.

Signal Word Danger

Hazard Statements
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

Precautionary Statements

P234	Keep only in original container.
P260	Do not breathe dusts or mists.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see on this label).
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container /container with a corrosion resistant inner liner.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 1310-73-2	Sodium hydroxide Skin Corrosion/Irritation 1A, H314; STOT SE 3, H335	30 - 60%
CAS: 497-19-8	Sodium carbonate Serious Eye Damage/Irritation 1, H318; STOT SE 3, H335	10 - 30%
CAS: 10213-79-3	Sodium metasilicate pentahydrate Corrosive To Metals 1, H290; Skin Corrosion/Irritation 1B, H314; STOT SE 3, H335	10 - 30%
CAS: 7782-50-5	Chlorine Acute Toxicity (Inhalation) 3, H331; Aquatic Acute 1, H400; Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	1.24%

4 First Aid Measures

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:
In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:
If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: May cause respiratory irritation, burning sensation in the chest, cough, laboured breathing, sore throat and runny nose.
Skin contact: Causes severe skin burns, redness and ulceration.
Eye contact: Causes serious eye damage. May cause redness and blurred vision.
Ingestion: May cause irritation or burns to the mouth, throat and stomach. May cause abdominal pain, nausea, vomiting, diarrhoea, low blood pressure, coma, heart failure and death. May cause swelling of the larynx and subsequent suffocation. Aspiration into the lungs may cause chemical pneumonitis and pulmonary oedema.

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5 Fire Fighting Measures

Suitable Extinguishing Media: Water fog or fine water spray.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of phosphorus, nitrogen and carbon and chlorine gas.
This product is not flammable, however contact with metals may generate flammable hydrogen gas.
Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear approved respiratory protection and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dusts. Ensure adequate ventilation.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Provide adequate ventilation.

7 Handling and Storage

Precautions for Safe Handling:
Reacts violently with acids.
May be corrosive to metals and wood.
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust.
Food, beverages and tobacco products should not be stored or consumed where this material is in use.
Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:
Store in original container in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect containers from physical damage. Protect from heat, direct sunlight and moisture. Keep away from acids, acidic salts, active metals (aluminium, tin, zinc), nitro compounds, organic halides, ammonium compounds and wood.

8 Exposure Controls and Personal Protection

Exposure Standards:	
CAS: 1310-73-2 Sodium hydroxide	
WES	Peak limitation: 2 mg/m³
CAS: 7782-50-5 Chlorine	
WES	Peak limitation: 3 mg/m³, 1 ppm

Engineering Controls: Ensure adequate ventilation of the workplace.

Respiratory Protection:
Where an inhalation risk exists, wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

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Skin Protection:
Rubber or plastic gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.
When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.
Impervious overalls, plastic apron, sleeves and boots should be worn when handling industrial quantities. See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:
Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:	
Form:	Granular powder
Colour:	Buff coloured
Odour:	Almost odourless
Odour Threshold:	No information available
pH-Value:	14 (Very alkaline)
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	None
Density:	No information available
Relative Density:	No information available
Vapour Density:	No information available
Evaporation Rate:	Not applicable
Solubility in Water:	Soluble in water with generation of heat.
Partition Coefficient (n-octanol/water):	No information available
% Volatiles by Volume:	~1.24 % (as available chlorine)
VOC:	Nil

10 Stability and Reactivity

Possibility of Hazardous Reactions:
Hazardous polymerisation will not occur.
Reacts violently with acids.
May be corrosive to metals and wood.
Contact with acids may generate carbon dioxide and chlorine.
Contact with ammonium salts may generate toxic ammonia gas.
Contact with metals may generate flammable hydrogen gas.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Physical damage to container, direct sunlight, heat and moisture.

Incompatible Materials:
Acids, acidic salts, active metals (aluminium, tin, zinc), nitro compounds, organic halides, ammonium compounds and wood.

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Hazardous Decomposition Products: Oxides of phosphorus, nitrogen and carbon and chlorine gas.

11 Toxicological Information

Toxicity:

LD_{50}/LC_{50} Values Relevant for Classification:		
CAS: 1310-73-2 Sodium hydroxide		
Oral	LD_{50}	2000 mg/kg (rat)
	LDLo	500 mg/kg (rabbit)
CAS: 497-19-8 Sodium carbonate		
	LC_{50}/2 hr	2300 mg/m³ (mouse)
Oral	LD_{50}	4090 mg/kg (rat)
CAS: 10213-79-3 Sodium metasilicate pentahydrate		
Oral	LD_{50}	1153 mg/kg (rat)
		770 mg/kg (mouse)
	LDLo	250 mg/kg (dog)
CAS: 7782-50-5 Chlorine		
Inhalation	LC_{50}/4 h	293 mg/l (rat)

Acute Health Effects
Inhalation:
May cause respiratory irritation, burning sensation in the chest, cough, laboured breathing, sore throat and runny nose.
Skin: Causes severe skin burns, redness and ulceration.
Eye: Causes serious eye damage. May cause redness and blurred vision.
Ingestion:
May cause irritation or burns to the mouth, throat and stomach. May cause abdominal pain, nausea, vomiting, diarrhoea, low blood pressure, coma, heart failure and death. May cause swelling of the larynx and subsequent suffocation. Aspiration into the lungs may cause chemical pneumonitis and pulmonary oedema.

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects:
Chronic exposure to low levels of chlorine may lead to chloracne and erosion of the teeth.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information: No information available

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12 Ecological Information

Ecotoxicity:

Aquatic toxicity:
Harmful to aquatic life with long lasting effects.

CAS: 1310-73-2 Sodium hydroxide	
EC_{50}/48 h	40.38 mg/l (daphnia)
LC_{50}/96 h	125 mg/l (mosquito fish)
	45.4 mg/l (rainbow trout)
CAS: 497-19-8 Sodium carbonate	
EC_{50}/48 h	265 mg/l (daphnia)
LC_{50}/96 h	300 mg/l (lepomis macrochirus)
EC_{50}/120hr	242 mg/l (algae)

Persistence and Degradability: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: No further relevant information available.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number
ADG, IMDG, IATA UN3262

Proper Shipping Name
ADG, IMDG, IATA CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide, sodium carbonate, sodium metasilicate)

Dangerous Goods Class
ADG Class: 8 Corrosive substances.

Packing Group:
ADG, IMDG, IATA II

EMS Number: F-A,S-B

Hazchem Code: 2X

Special Provisions: 274

Limited Quantities: 1 kg

Packagings & IBCs - Packing Instruction: P002, IBC08

Packagings & IBCs - Special Packing Provisions: B2, B4

Portable Tanks & Bulk Containers - Instructions: T3

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Portable Tanks & Bulk Containers - Special Provisions: TP33

15 Regulatory Information

Australian Inventory of Chemical Substances:	
CAS: 1310-73-2	Sodium hydroxide
CAS: 497-19-8	Sodium carbonate
CAS: 7782-50-5	Chlorine
CAS: 10213-79-3	Sodium metasilicate pentahydrate

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 02.09.2019

Last Revision of MSDS: 01.09.2009

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
ADG: Australian Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds
LC_{50}: Lethal concentration, 50 percent
LD_{50}: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Corrosive To Metals 1: Corrosive to metals – Category 1
Acute Toxicity (Inhalation) 3: Acute toxicity – Category 3
Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A
Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B
Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2
Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1
Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1
Aquatic Acute 3: Hazardous to the aquatic environment, short-term (Acute). Category 3

Disclaimer
This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”
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