

# Safety Data Sheet

according to WHS Regulations

Printing date 02.09.2019

Revision: 02.09.2019

## 1 Identification

**Product Name: COMET****Other Means of Identification:** Mixture**Other Name:** Mixture of alkaline salts containing sodium metasilicate**Recommended Use of the Chemical and Restriction on Use:** Detergent mixture for dishwashing machines**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 1B

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 2

H401 Toxic 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.

H401 Toxic 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: 497-19-8	Sodium carbonate ⚠ Serious Eye Damage/Irritation 1, H318; ⚠ STOT SE 3, H335	30 - 60%
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	2.48%

### 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. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

#### Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation, coughing, wheezing and shortness of breath. May cause pulmonary oedema.

Skin Contact: Causes severe skin burns. May cause degreasing effect on the skin.

Eye Contact: Causes serious eye damage.

Ingestion: May cause irritation or burns to the mouth, throat and gastrointestinal system. May cause perforation of the stomach or intestines. May cause swelling of the larynx and subsequent suffocation. May cause nausea, vomiting, diarrhoea, ulceration and bleeding. May cause shock and collapse. Aspiration of the mixture into the lungs during swallowing or vomiting may cause serious lung injury.

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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 carbon and phosphorous, chlorine and hydrogen chloride. 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 dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust. Do not touch or walk through spilt product. Product may be slippery when spilt.

**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. Decontaminate spill area with detergent and water.

### 7 Handling and Storage

**Precautions for Safe Handling:**

Reacts violently with acids.

May be corrosive to metals.

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 a cool, dry and well ventilated area. Keep container tightly closed when not in use. Store in original container. Protect containers from physical damage. Protect from direct sunlight and moisture. Keep away from acids, oxidising agents and active metals such as aluminium, tin or zinc.

### 8 Exposure Controls and Personal Protection

**Exposure Standards:**

**CAS: 7782-50-5 Chlorine**

WES | Peak limitation: 3 mg/m<sup>3</sup>, 1 ppm

**Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

**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.

**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

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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:**

<b>Form:</b>	Granular powder
<b>Colour:</b>	White
<b>Odour:</b>	Slight smell of chlorine
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	~11.5
<b>Melting point/freezing point:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	No information available
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	Not applicable
<b>Upper:</b>	Not applicable
<b>Vapour Pressure:</b>	No information available
<b>Density:</b>	No information available
<b>Relative Density:</b>	No information available
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility in Water:</b>	Soluble in water
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>% Volatiles by Volume:</b>	About 2.5 % (As available chlorine)
<b>VOC:</b>	Nil

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:**

Hazardous polymerisation will not occur.

Reacts violently with acids.

May be corrosive to metals.

Contact with acids may generate carbon dioxide and chlorine.

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 and moisture.

**Incompatible Materials:** Acids, oxidising agents and active metals such as aluminium, tin or zinc.

**Hazardous Decomposition Products:** Oxides of carbon and phosphorous, chlorine and hydrogen chloride.

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## 11 Toxicological Information

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****CAS: 497-19-8 Sodium carbonate**

	LC <sub>50</sub>	2300 mg/m <sup>3</sup> /2hrs (rat)
Oral	LD <sub>50</sub>	4090 mg/kg (rat)

**CAS: 10213-79-3 Sodium metasilicate pentahydrate**

Oral	LD <sub>50</sub>	1153 mg/kg (rat)
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**Acute Health Effects****Inhalation:**

May cause respiratory irritation, coughing, wheezing and shortness of breath. May cause pulmonary oedema.

**Skin:** Causes severe skin burns. May cause degreasing effect on the skin.

**Eye:** Causes serious eye damage.

**Ingestion:**

May cause irritation or burns to the mouth, throat and gastrointestinal system. May cause perforation of the stomach or intestines. May cause swelling of the larynx and subsequent suffocation. May cause nausea, vomiting, diarrhoea, ulceration and bleeding. May cause shock and collapse. Aspiration of the mixture into the lungs during swallowing or vomiting may cause serious lung injury.

**Skin Corrosion / Irritation:** Causes severe skin burns.

**Serious Eye Damage / Irritation:** Causes serious eye damage.

**Respiratory or Skin Sensitisation:** Based on classification principles, 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:**

Repeated or prolonged skin contact may cause dermatitis. Prolonged or repeated inhalation of dust may lead to nose bleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis.

**Existing Conditions Aggravated by Exposure:**

Persons with compromised respiratory function may be more susceptible to inhalation exposure.

## 12 Ecological Information

**Ecotoxicity:** This product contains a phosphate which may contribute to the development of algal blooms.

**Aquatic toxicity:****CAS: 497-19-8 Sodium carbonate**

EC <sub>50</sub> /48 h	265 mg/l (daphnia)
LC <sub>50</sub> /96 h	300 mg/l (Iepomis macrochirus)
EC <sub>50</sub> /120hr	242 mg/l (algae)

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**Persistence and Degradability:**

This product contains a surfactant that is not considered to be readily biodegradable.

**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

<b>UN Number</b> <b>ADG, IMDG, IATA</b>	UN3262
<b>Proper Shipping Name</b> <b>ADG, IMDG, IATA</b>	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium carbonate, sodium metasilicate)
<b>Dangerous Goods Class</b> <b>ADG Class:</b>	8 Corrosive substances.
<b>Packing Group:</b> <b>ADG, IMDG, IATA</b>	III
<b>EMS Number:</b>	F-A,S-B
<b>Hazchem Code:</b>	2X
<b>Special Provisions:</b>	223, 274
<b>Limited Quantities:</b>	5 kg
<b>Packagings &amp; IBCs - Packing Instruction:</b>	P002, IBC08, LP02
<b>Packagings &amp; IBCs - Special Packing Provisions:</b>	B2, B4
<b>Portable Tanks &amp; Bulk Containers - Instructions:</b>	T3
<b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b>	TP33

### 15 Regulatory Information

**Australian Inventory of Chemical Substances:**

CAS: 497-19-8	Sodium carbonate
CAS: 10213-79-3	Sodium metasilicate pentahydrate
CAS: 7782-50-5	Chlorine

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

Poisons Schedule: 5

### 16 Other Information

**Date of Preparation or Last Revision:** 02.09.2019**Last Revision of MSDS:** 01.09.2009

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**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<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: 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 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 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

**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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