

Printing date 28.08.2014

Revision: 01.08.2014

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: COMET

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: 13 11 26 (Poisons Information Centre)

2 . HAZARDS IDENTIFICATION

Hazardous Nature:



corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



Acute Tox. 4 H332 Harmful if inhaled.

STOT SE 3 H335 May cause respiratory irritation.

Label Elements

Signal Word Danger

Hazard Statements

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER/doctor.

P312 Call a POISON CENTER/doctor if you feel unwell.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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Dispose of contents/container in accordance with local/regional/national regulations.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

497-19-8	Sodium carbonate ⚠ Eye Irrit. 2, H319	30-60%
10213-79-3	Sodium metasilicate pentahydrate ⚠ Met. Corr. 1, H290; Skin Corr. 1B, H314; ⚠ STOT SE 3, H335	10-30%
7782-50-5	Chlorine ⚠ Acute Tox. 3, H331; ⚠ Aquatic Acute 1, H400; ⚠ Skin Irrit. 2, H315; Eye Irrit. 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 immediate medical attention.

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 immediate medical attention.

Ingestion: If swallowed, do not induce vomiting. Seek immediate medical attention.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water fog or fine water spray.

Specific Hazards Arising from the Chemical:

Contact with active metals (in the presence of moisture) such as aluminium, tin or zinc generates flammable hydrogen gas.

Hazardous combustion products include oxides of phosphorous, carbon, chlorine and hydrogen chloride.

Special Protective Equipment and Precautions for Fire Fighters:

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear Safe Work Australia 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.

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.

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7 . HANDLING AND STORAGE

Precautions for Safe Handling:

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 from physical damage. Keep away from acids, moisture and active metals such as aluminium, tin, zinc and galvanised iron.

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

7782-50-5 Chlorine

NES	TWA: 3 mg/m ³ , 1 ppm
	Peak limitation: 3 mg/m ³ , 1 ppm

Engineering Controls:

Ensure adequate ventilation of the workplace. If handling industrial quantities, or if vapour/dust risk exists, provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour as low as possible, at least below the occupational exposure limits.

Personal Protective Equipment (PPE):

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 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, such as face shield and safety glasses. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Granular powder
Colour:	White
Odour:	Slight smell of chlorine
Odour Threshold:	No information available
pH-Value:	About 11.5
Melting point/Melting range:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable

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Flammability:	No information available
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	No information available
Density:	No information available
Relative Density:	No information available
Vapour Density:	No information available
Evaporation Rate:	Not applicable
Solubility in Water:	Soluble in water
Partition Coefficient (n-octanol/water):	No information available
% Volatiles by Volume:	About 2.5 % (As available chlorine)
VOC:	Nil

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions:

Highly alkaline, will react vigorously or violently with acids generating carbon dioxide, a simple asphyxiant and chlorine, a toxic gas. Corrosive to active metals such as aluminium, tin and zinc in the presence of moisture, generating hydrogen, a flammable gas.

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Moisture and physical damage to container.

Incompatible Materials:

Acids, active metals (such as aluminium, tin, zinc) especially in the presence of moisture, oxidising agents and reducing agents.

Hazardous Decomposition Products:

Chlorine and hydrogen chloride, oxides of phosphorous and oxides of carbon.

11 . TOXICOLOGICAL INFORMATION

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

497-19-8 Sodium carbonate

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

10213-79-3 Sodium metasilicate pentahydrate

Oral	LD ₅₀	1153 mg/kg (rat)
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Acute Health Effects

Inhalation:

Harmful if inhaled. Inhalation of dust will irritate the upper respiratory system. May cause a burning pain in the nose and throat, coughing, wheezing and shortness of breath. Risk of delayed onset pulmonary oedema (build up of fluid in the lungs). Inhalation of traces of chlorine vapour may cause irritation, cough and sore throat.

Skin: May cause irritation and skin burns, especially when wet. Will have degreasing effect on the skin.

Eye: May cause severe irritation and possible eye burns. Risk of permanent injury.

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Ingestion:

Corrosive if swallowed. May cause nausea, vomiting, severe irritation and abdominal pain, ulceration and or bleeding from the stomach, duodenum and small intestine. May cause electrolyte disturbances, 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 lead to irritation, dermatitic effects and possible sensitisation. Prolonged or repeated inhalation of dust may cause nose bleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis. Chronic exposure to low levels of chlorine vapour may cause chloracne.

Existing Conditions Aggravated by Exposure:

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

12 . ECOLOGICAL INFORMATION

Ecotoxicity:

May be harmful to aquatic organisms. Contains a moderate proportion of phosphate, may contribute to the formation of algal bloom.

Aquatic toxicity: No information available

Persistence and Degradability:

The surfactant used in this product is not considered to be readily biodegradable.

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:

Avoid disposal to natural waters or the environment. Do not use metal containers. Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Not suitable for incineration or some landfill sites. Please consult your state Land Waste Management Authority for more information.

14 . TRANSPORT INFORMATION

UN Number

3253

Proper Shipping Name

DISODIUM TRIOXOSILICATE

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Dangerous Goods Class	8
Packing Group:	III
EMS Number:	F-A,S-B
Hazchem Code:	2X
Special Provisions:	Not applicable
Limited Quantities:	5 kg
Packagings & IBCs - Packing Instruction:	P002, IBC08, LP02
Packagings & IBCs - Special Packing Provisions:	B3
Portable Tanks & Bulk Containers - Instructions:	T1
Portable Tanks & Bulk Containers - Special Provisions:	TP33

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

497-19-8	Sodium carbonate
7782-50-5	Chlorine

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 5

16 . OTHER INFORMATION

Creation Date: 01.08.2014**Last Revision of MSDS:** 01.09.2009**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au

Abbreviations and acronyms:

GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds
 LC₅₀: Lethal concentration, 50 percent
 LD₅₀: 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)

Disclaimer

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

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