



SAFETY DATA SHEET

CUSTOM CHEMICALS INTERNATIONAL

Product: TIGER

Date of Issue: JANUARY 2013

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SECTION 1 – STATEMENT OF CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER: Custom Chemicals International Pty Ltd
ADDRESS: 103-107 Potassium Street, Narangba 4504 Queensland Australia
Trade Name: **“TIGER” DISINFECTANT CLEANSER**
TELEPHONE: +617 3204 8300 **FAX:** +617 3204 8311
AH EMERGENCY TELEPHONE: 13 1126 in Australia **ABN:** 73 050 537 674
Substance: Water based cleaner **Product Use:** Detergent/Disinfectant
Creation Date: JAN 2013 **Revision Date:** JAN 2018
Product Code: 0010026; 0050260[5L], 0050261[20L], 0050262[200L]

SECTION 2 – HAZARDS IDENTIFICATION

- This product is **NOT classified as HAZARDOUS** according to criteria of the National Occupational Health and Safety Commission Australia.
- This product is **NOT classified as Dangerous Goods** according to the Australian Dangerous Goods (ADG) Code.
- This product is **classified as a Scheduled 5 Poison** according to the SUSMP.

Approved NOHSC

Classification	Not hazardous.	ADG Classification	None allocated
UN Number	None allocated	ADG Subsidiary Risk	None allocated
Shipping Name	None allocated	Packing Group	None allocated
Hazchem Code	None allocated		
SUSMP Classification	S5 CAUTION		

EMERGENCY OVERVIEW

Colour	Clear turquoise blue	Odour	Citrus
Physical Description	Liquid	Viscosity	Non-viscous liquid
Major Health Hazards	Mild irritant – eyes, skin, mucous membranes.		

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication “List of Designated Hazardous Substances” or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication “Approved Criteria for Classifying Hazardous Substances”.

Ingredients:	CAS Number:	Proportion:	Exposure Standards TWA	Exposure Standards STEL
Quaternary ammonium compounds	63449-41-2	< 5 % w/w	not set	not set
(R)-p-mentha-1,8-diene	5989-27-5	< 1.0% w/w	not set	not set
1-methoxy-2-propanol	107-98-2	< 10% w/w	100ppm	not set
Disodium metasilicate	6834-92-0	< 10% w/w	not set	not set
Ingredients determined to be non-hazardous	Various	< 10% w/w	not set	not set
Water	7732-18-5	> 60% w/w	not set	not set

The **TWA** exposure value is the Time Weighted Average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The **STEL** (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term “peak” is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

SECTION 4 – FIRST AID MEASURES

Scheduled Poisons Poisons Information Centres in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 0800 764 766).



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First Aid Facilities	Normal washroom facilities.
Skin contact	Wash skin with plenty of water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness develops.
Eye contact	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Seek medical advice (e.g. ophthalmologist).
Ingestion	Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor).
Inhalation	Remove person to fresh air- avoid exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position, keep warm and to rest. Seek immediate medical advice if required (e.g. doctor).
Advice to Doctor	Treat symptomatically. All treatments should be based on observed signs and symptoms of distress of the patient. Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons.
Aggravated Medical Conditions	None known.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Water based. Not combustible. However if involved in a fire will emit toxic fumes.
Extinguishing Media	Use carbon dioxide (CO ₂) fire extinguisher, water fog or fine water spray.
Fire Fighting	Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition. Evacuate area - move upwind of fire.
Flash Point	None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures	No HAZCHEM code.
Occupational Release	Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water-courses. Wear appropriate protective equipment as in section 8 below to prevent skin and eye contamination. Spilt material may result in a slip hazard and should be absorbed into dry, inert material (e.g. sand, earth or vermiculite), which then can be put into appropriately labelled drums for disposal by an approved agent according to local conditions. Residual deposits will remain slippery. Wash area down with excess water. If contamination of sewers or waterways has occurred advise the local emergency services. In the event of a large spillage notify the local environment protection authority or emergency services.

SECTION 7 – HANDLING AND STORAGE

Handling	Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with water after handling.
Storage	Store in a cool, dry, place with good ventilation. Avoid storing in aluminium and light alloy containers. Store away from incompatible materials (Section 10). Keep containers closed at all times – check regularly for leaks.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION



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Exposure Limits

National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission:

Time-weighted Average (TWA): None established for specific product.

See **SECTION 3** for Exposure Limits of individual ingredients.

Short Term Exposure Limit (STEL): None established for specific product.

See **SECTION 3** for Exposure Limits of individual ingredients.

Biological Limit Value

None established for product.

Engineering Controls

Ensure ventilation is adequate to maintain air concentrations below exposure standards. Avoid generating mists of the product. Use only in a well-ventilated area. Ensure airflow, where this product is used, is directed away from the operators.

Personal Protective Equipment

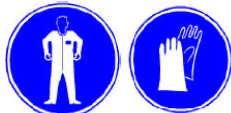
This product is NOT classified as a hazardous according to the criteria of Worksafe Australia. Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. Final choice of appropriate protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. The following protective equipment should be available;

Eye Protection



The use of safety glasses with side shield protection, goggles or face shield is recommended to handle in quantity, cleaning up spills, decanting, etc. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Skin Protection



Wear gloves. Overalls, apron, work boots and elbow length gloves are recommended for handling the concentrated product (as per AS/NZS 2161, or as recommended by supplier) to handle in quantity, cleaning up spills, decanting, etc.

Protective Material Types

Material suitable for detergent contact – Butyl rubber, Natural Latex, Neoprene, PVC, and Nitrile.

Respirator



Not required for normal cleaning operations with adequate ventilation.

Where high contaminant spray mist or vapour levels exist, ie, approaching the exposure limit, the following additional equipment is required: For short elevated exposures, eg, spillages:- Appropriate organic vapour cartridge respirator as per the requirements of AS/NZS 1715 and AS/NZS 1716 (Respiratory protective devices). For prolonged exposure and confined spaces:- full face air supplied or self contained breathing apparatus (if vapour levels exceed the Exposure Limit by more than ten times, air supplied apparatus should be used).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Non-viscous liquid	Colour	Clear turquoise blue
Odour	Citrus odour	Specific Gravity	1.01 – 1.03 @ 25 °C
Boiling Point	Approximately 100 °C	Freezing Point	Approximately 0 °C
Vapour Pressure	Not available	Vapour Density	Not available
Flash Point	Not flammable	Flammable Limits	None
Water Solubility	Miscible in all proportions	pH	11.5 – 12.5 neat
Volatile Organic Compounds (VOC)	0 % v/v	Coefficient of Water/Oil Distribution	Not available
Viscosity	Not available	Odour Threshold	Not available
Evaporation Rate	Not available	Per Cent Volatile	Ca 80% v/v

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability Stable at normal temperatures and pressure.

Conditions to Avoid Avoid contact with heat or heat sources.



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Incompatible Materials	Reducing agents, oxidizing agents.
Hazardous Decomposition Products	Product can decompose on combustion to form Carbon Monoxide, Carbon Dioxide, and other possibly toxic gases and vapours.
Hazardous Reactions	None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

PRODUCT MIXTURE INFORMATION

Local Effects Irritant: eye, skin, inhalation and ingestion.

Target Organs Eyes, mucous membranes, skin.

POTENTIAL HEALTH EFFECTS

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion

short term exposure Swallowing can result in nausea, vomiting of blood and eroded tissue; chemical burns of the mouth, throat & abdomen.

long term exposure No information available.

Skin contact

short term exposure Irritating to skin - may cause skin irritation. Irritation will continue until removed. Severity depends on the concentration and duration of exposure.

long term exposure Prolonged and repeated skin contact with solutions may induce eczematoid dermatitis in certain individuals.

Eye contact

short term exposure Irritating to eyes; contact can cause corneal burns.

long term exposure No information available.

Inhalation

short term exposure Inhalation of mists or aerosols can produce mucous membrane and respiratory irritation.

long term exposure No information available.

Carcinogen Status

NOHSC No significant ingredient is classified as carcinogenic by NOHSC.

NTP No significant ingredient is classified as carcinogenic by NTP.

IARC No significant ingredient is classified as carcinogenic by IARC.

Medical conditions aggravated by exposure None known.

CLASSIFICATION OF INDIVIDUAL INGREDIENTS

Individual Ingredient Information

NOTE : This information relates to each individual ingredient, when evaluated as pure undiluted chemical. See Section 3 for proportions of ingredients present in the product.

Ingredients

1-methoxy-2-propanol

(R) - p-mentha-1,8-diene

Quaternary ammonium compounds

Disodium metasilicate

R-Phrases.

R10

R10, R38, R43, R50/53

R34, R21/22, R50

R34, R37

100% QUATERNARY AMMONIUM COMPOUNDS

Irritation Data

Very hazardous in case of skin contact (irritant), of ingestion, Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive). Skin – moderate irritant (rabbit). Eyes – severe irritant (rabbit)

Toxicity Data

Acute oral toxicity (LD50): 240 mg/kg [Rat].

Local Effects

Corrosive: inhalation, skin, eye. Harmful: ingestion.

Target Organs

May cause damage to the following organs: kidneys, liver, heart, gastrointestinal tract, cardiovascular system, central nervous system (CNS).

Acute Toxicity Level

No available information.



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Mutagenic Data Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

Reproductive Data No available information.

Carcinogenicity Not classed as a carcinogen by NOHSC.

100% 1-METHOXY-2-PROPANOL (PGME)

Irritation Data PGME is not a skin sensitizer or skin irritant, and was only slightly irritating to the eye.

Toxicity Data PGME exhibits low acute toxicity by the oral, dermal, and inhalation routes. The oral LD 50 ranges from 1,840 mg/kg in rabbits, 4,600 mg/kg in dogs, to >5,000 mg/kg in rats. Dermal LD 50 values were 13-14 gm/kg in rabbits. Inhalation LC 50 values were generally above 6,000 ppm for rats, mice, and guinea pigs. In repeated dose studies (11 days to six months) NOAELs of 300 ppm and higher have been observed in inhalation studies using rats, mice, rabbits, guinea pigs, and monkeys. Effects observed included sedation, hepatic changes, and decrease in body weight gain. NOAELs (oral) of 459.5 mg/kg and 919 mg/kg were observed in rat studies lasting 13 and 5 weeks, respectively.

Local Effects Irritant: inhalation, skin, eye.

Target Organs Skin, eyes.

Acute Toxicity Level Harmful- inhalation, dermal absorption, ingestion.

Mutagenic Data In reproductive toxicity testing, effects observed at 3000 ppm appear to be related to decreased maternal body weights and secondary to general toxicity and nutritional stress. Decreased maternal body weights were also noted at 1000 ppm. The NOAELs observed in the two-generation study were 300 ppm for adults and 1,000 ppm for offspring.

Reproductive Effects Data Studies in rats, mice, and rabbits showed that PGME was not teratogenic (two inhalation and three gavage studies with teratogenicity NOAELs of 3000 ppm and 800 to 2000 mg/kg, respectively).

100% (R) - P-MENTHA-1,8-DIENE

Irritation Data Irritant: skin, eye, inhalation and ingestion. Acute eye irritation = Eye irritation, rabbit. Severely irritating. The skin irritancy of limonene in guinea pigs and rabbits is considered moderate and low, respectively. Inhalation: RD50 >1000 ppm. (R) - p-mentha-1,8-diene is not a skin sensitizer. Improper storage and handling can lead to oxidation. The oxidized forms have shown potential to be skin sensitizers.

Toxicity Data LD₅₀, Oral (rat): 4,400 mg/kg.
LD₅₀, Dermal (rabbit): >2,000 mg/kg.
LD₅₀, Dermal (mice): 5,600 to 6,600 mg/kg.

Local Effects Eye, skin and mucous membrane irritation

Target Organs Eye, skin and mucous membranes

Mutagenic Data No information.

Reproductive effects No information.

Reproductive Effects Data No available information.

100% DISODIUM METASILICATE

Irritation Data Hazardous in case of skin contact (corrosive), of ingestion (corrosive), of inhalation (lung irritant). Causes burns Eye: Risk of serious damage to eyes. Respiratory: Irritating to respiratory system. Sensitization: No sensitizing (30% w/w in a formulation).

250 mg/24 hour(s) skin-human : severe

250 mg/24 hour(s) skin-rabbit : severe

250 mg/24 hour(s) skin-guinea pig : moderate.

Toxicity Data 1153 mg/kg oral-rat LD50; 770 mg/kg oral-mouse LD50; 250 mg/kg oral-dog LDLo; 250 mg/kg oral-pig LDLo; 200 mg/kg intraperitoneal-guinea pig LDLo.

Other toxicological information: The toxic effects of the product are caused by the alkalinity and not by substance specific corrosive nature of the product.

Local Effects Corrosive: inhalation, skin, eye, ingestion

Target Organs Skin, mucous membranes, eyes.

Acute Toxicity Level Moderately Toxic: ingestion

Mutagenic Data Gentoxicity: Not mutagenic (in vitro)



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Reproductive Effects Data

15 gm/kg oral-rat TDLo 14 week(s) male week(s) pre pregnancy/14 week(s) post pregnancy/3 week(s) continuous; 9766 ug/kg subcutaneous-rat TDLo 1 day(s) male; 9766 ug/kg intratesticular-rat TDLo 1 day(s) male.

SECTION 12 – ECOLOGICAL INFORMATION

Fish toxicity

None available for this specific product. Individual ingredients: The following information relates to Sodium, Silicate, Solution, Molar > 3,2 concentration 35% (IUCLID). Ecotoxicity: Fish: 96h - LC50 (Brachydanio rerio, OECD no. 203) : 3185 mg/l (pH 10.1) Daphnia: 48 h - EC50 (Daphnia magna): 4857 mg/l. Daphnia: 48 h - EC50 (Daphnia magna): 4857 mg/l

Algae toxicity

None available for this specific product.

Invertebrates toxicity

None available.

Toxicity to Bacteria

None available for this specific product. Individual ingredients: The following information relates to Sodium, Silicate, Solution, Molar > 3,2 concentration 35% (IUCLID). Bacteria: 48 h - EC 0 (Pseudomonas putida, OECD no. 209) > 1000mg/l (ph 7.9)

OECD Biological degradation

Individual components stated to be biodegradable. The following information relates to Sodium, Silicate, Solution, Molar > 3,2 concentration 35% (IUCLID). Environmental behaviour: Degradation abiotic: In aqueous solution of pH=< 9 the silicate is mineralized and precipitated. The maximum concentration of soluble silicates at this pH is 120 mg/l. Degradation Biotic: not applicable. Other information: The pH rise is responsible for the environmental effect on the aquatic life. If not neutralized, this product can be toxic for aquatic organism because of its alkalinity. PH >9 has a corrosive effect on fish (possibly causing death). PH >8.5 will result in destruction of algae.

General

Product miscible in all proportions with water. AS WITH ANY CHEMICAL PRODUCT, DO NOT DISCHARGE BULK QUANTITIES INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT. Inform local authorities if this occurs.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal

To dispose of quantities of undiluted product, refer to State Land Waste Management Authority. Transfer product residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. As with any chemical, do not put down the drain in quantity. The small quantities contained in wash solutions (when used as directed) can generally be handled by conventional sewage systems, septs, and grey water systems. For larger scale use, eg. Commercial laundry operations, a recycled water system is often recommended, or Trade Waste License obtained for disposal to sewer.

SECTION 14 – TRANSPORT INFORMATION

UN Number

None allocated

ADG Classification

None allocated

Shipping Name

None allocated

ADG Subsidiary Risk

None allocated

Hazchem Code

None allocated

Packing Group

None allocated

Packaging Method

None allocated

Special Provisions

None allocated

Segregation

None allocated

SECTION 15 – REGULATORY INFORMATION

Labeling Details

HAZARD

Not hazardous

RISK PHRASES

None allocated

SAFETY PHRASES

None allocated



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SUSMP

S5 (AKALINE SALTS pH 11.5 – 12.5)

Signal word:

CAUTION

Cautionary Statement/s:

**KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS
DO NOT SWALLOW**

First Aid:

(A) For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor (at once).

(G3) – If swallowed, do NOT induce vomiting.

(E2) - If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes.

(S1) - If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

WARNING:

(4) – Strongly alkaline.

SAFETY DIRECTIONS:

(1) - Avoid contact with eyes.

(4) - Avoid contact with skin.

**ADG Code
AICS**

None allocated

All ingredients present on AICS.

SECTION 16 – OTHER INFORMATION

Acronyms

SUSMP

Standard for the Uniform Scheduling of Medicines and Poisons.

ADG Code

Australian Code for the Transport of Dangerous Goods by Road and Rail.

CAS Number

Chemical Abstracts Service Registry Number.

UN Number

United Nations Number.

R-Phrases

Risk Phrases.

HAZCHEM

An emergency action code of numbers and letters which gives information to emergency services.

NOHSC

National Occupational Health and Safety Commission.

NTP

National Toxicology Program (USA).

IARC

International Agency for Research on Cancer.

AICS

Australian Inventory of Chemical Substances.

TWA

Time Weighted Average

STEL

Short Term Exposure Limit

Literature References

List of Designated Hazardous Substances [NOHSC:10005(1999)]

Australian Code For The Transport Of Dangerous Goods By Road And Rail – Seventh Edition.

Standard for the Uniform Scheduling of Medicines and Poisons 2011.

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]

Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]

Material Safety Data Sheets – individual raw materials – Suppliers.

HSIS – Hazardous Substance Information System – National Worksafe Data Base.

New Issue to standard : 2nd Edition [NOHSC:2011(2003)].

Revision Information

Note

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

Contact Point

Regulatory Affairs Manager.

Telephone

(07) 3204 8300

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JANUARY 2013

Supersedes Issue Date

2007



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This SDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.