## **Auto Klene Solutions**

Chemwatch Hazard Alert Code: 2 Issue Date: 10/01/2017

Print Date: 12/01/2017

S.GHS.NZL.EN

Chemwatch: **73-5413** Version No: **4.1.1.1** Safety Data Sheet according to HSNO Regulations

# SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### **Product Identifier**

Product name	Auto Klene Auto Ezy Wax
Synonyms	Not Available
Other means of identification	Not Available

#### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Sealer Wax/Drying Agent.

### Details of the supplier of the safety data sheet

Registered company name	Auto Klene Solutions
Address	1/83 Merrindale Drive VIC Croydon 3136 Australia
Telephone	+61 3 8761 1900
Fax	+61 3 8761 1955
Website	https://www.autoklene.com/msds/
Email	Not Available

## Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	131 126 (Poisons Information Centre)
Other emergency telephone numbers	0800 764 766 (New Zealand Poisons Information Centre)

# **SECTION 2 HAZARDS IDENTIFICATION**

#### Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

#### CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	1		
Toxicity	2		0 = Minimum
Body Contact	2		1 = Low 2 = Moderate
Reactivity	1		3 = High
Chronic	1		4 = Extreme

Classification <sup>[1]</sup>	Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria	6.1D (oral), 6.3A, 6.4A, 6.9 (narcotic), 9.1C, 9.1D	
Label elements		
GHS label elements		
SIGNAL WORD	WARNING	
Hazard statement(s)		

H302	Harmful if swallowed.
H315	Causes skin irritation.

H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	
H412	Harmful to aquatic life with long lasting effects.	
Precautionary statement(s) Prevention		
P271	Use only outdoors or in a well-ventilated area.	
P261	Avoid breathing mist/vapours/spray.	
P270	Do not eat, drink or smoke when using this product.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	

### Precautionary statement(s) Response

P362	Take off contaminated clothing and wash before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P330	Rinse mouth.

### Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

# Precautionary statement(s) Disposal

P501 Dis

Dispose of contents/container in accordance with local regulations.

## **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

# Substances

See section below for composition of Mixtures

# Mixtures

CAS No	%[weight]	Name
61789-77-3	10-30	dicocodimethylammonium chloride
67-63-0	10-30	isopropanol
68989-03-7	1-10	guaternary cocoamine dimethyl sulfate, ethoxylated
111-76-2	0-10	ethylene glycol monobutyl ether
Not Available	<1	perfume
7732-18-5	balance	water
	balance	Ingredients determined not to be hazardous

# SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

### Description of first aid measures

Eye Contact	<ul> <li>If in eyes, hold eyelids apart and flush the eye continuously with running water.</li> <li>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin contact occurs:</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>
Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul> <li>IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.</li> <li>For advice, contact a Poisons Information Centre or a doctor.</li> <li>Urgent hospital treatment is likely to be needed.</li> <li>In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.</li> <li>If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.</li> <li>If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.</li> </ul>

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise F INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

NOTE: Wear a protective glove when inducing vomiting by mechanical means.

#### Indication of any immediate medical attention and special treatment needed

As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination).

For poisons (where specific treatment regime is absent):

#### BASIC TREATMENT

• Establish a patent airway with suction where necessary.

- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 L/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures.
- > DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

ADVANCED TREATMENT

+ Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.

- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- + Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

Treat symptomatically.

#### **SECTION 5 FIREFIGHTING MEASURES**

#### Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog Large fires only.

#### Special hazards arising from the substrate or mixture

Fire Incompatibility	• Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result		
Advice for firefighters			
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>Avoid spraying water onto liquid pools.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> </ul>		
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> <li>Mists containing combustible materials may be explosive.</li> <li>Combustion products include:</li> <li>,</li> </ul>		
	, carbon dioxide (CO2) , hydrogen chloride , phosgene , nitrogen oxides (NOx) , other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.		

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

See section 8

## **Environmental precautions**

See section 12

### Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>Wipe up.</li> <li>Place in a suitable, labelled container for waste disposal.</li> </ul>
Major Spills	<ul> <li>Moderate hazard.</li> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>No smoking, naked lights or ignition sources.</li> <li>Increase ventilation.</li> </ul>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

# SECTION 7 HANDLING AND STORAGE

# Precautions for safe handling

Safe handling	<ul> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> <li>The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example.</li> <li>Purchases of peroxidisable chemicals should be restricted to ensure that the chemical is used completely before it can become peroxidised.</li> <li>A responsible person should maintain an inventory of peroxidisable chemicals or annotate the general chemical inventory to indicate which chemicals are subject to peroxidation. An expiration date should be determined. The chemical should either be treated to remove peroxides or disposed of before this date.</li> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>Avoid smoking, naked lights or ignition sources.</li> <li>Avoid contact with incompatible materials.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>No smoking, naked lights or ignition sources.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

#### Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>DO NOT use aluminium or galvanised containers</li> <li>Metal can or drum</li> <li>Packaging as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	<ul> <li>Alcohols</li> <li>are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.</li> <li>reacts, possibly violently, with alkaline metals and alkaline earth metals to produce hydrogen</li> <li>react with strong acids, strong caustics, aliphatic amines, isocyanates, acetaldehyde, benzoyl peroxide, chromic acid, chromium oxide, dialkylzincs, dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium</li> <li>should not be heated above 49 deg. C. when in contact with aluminium equipment</li> </ul>

# SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Control parameters**

# OCCUPATIONAL EXPOSURE LIMITS (OEL)

### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1,230 mg/m3 / 500 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	ethylene glycol monobutyl ether	2-Butoxyethanol (Butyl glycol ether)	121 mg/m3 / 25 ppm	Not Available	Not Available	(skin) - Skin absorption

# EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
isopropanol	Isopropyl alcohol	400 ppm	2000 ppm	12000 ppm

ethylene glycol monobutyl ether	Butoxyethanol, 2-; (Glycol ether EB)	60 ppm	120 ppm	700 ppm
Ingredient	Original IDLH	Revised IDLH		
dicocodimethylammonium chloride	Not Available	Not Available		
isopropanol	12,000 ppm	2,000 [LEL] ppm		
quaternary cocoamine dimethyl sulfate, ethoxylated	Not Available	Not Available		
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm		
perfume	Not Available	Not Available		
water	Not Available	Not Available		

#### Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.
Personal protection	
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</li> <li>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</li> <li>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.</li> </ul>
Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>P.V.C. apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>
Thermal hazards	Not Available

### Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the  $\ensuremath{\textit{computer-generated}}$  selection:

Auto Klene Auto Ezy Wax

Material	CPI
BUTYL	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С
SARANEX-23	С
VITON	С

### **Respiratory protection**

Type AB-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	AB-AUS / Class 1 P2	-	AB-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	AB-2 P2	AB-PAPR-2 P2
up to 50 x ES	-	AB-3 P2	-
50+ x ES	-	Air-line**	-

#### ^ - Full-face

 $\begin{array}{l} \mathsf{A}(\mathsf{All classes}) = \mathsf{Organic vapours}, \mathsf{B} \: \mathsf{AUS or} \: \mathsf{B1} = \mathsf{Acid gasses}, \: \mathsf{B2} = \mathsf{Acid gas or hydrogen} \\ \mathsf{cyanide}(\mathsf{HCN}), \: \mathsf{B3} = \mathsf{Acid gas or hydrogen cyanide}(\mathsf{HCN}), \: \mathsf{E} = \mathsf{Sulfur dioxide}(\mathsf{SO2}), \: \mathsf{G} = \\ \mathsf{Agricultural chemicals}, \: \mathsf{K} = \mathsf{Ammonia}(\mathsf{NH3}), \: \mathsf{Hg} = \mathsf{Mercury}, \: \mathsf{NO} = \mathsf{Oxides of nitrogen}, \: \mathsf{MB} = \\ \mathsf{Methyl bromide}, \: \mathsf{AX} = \mathsf{Low boiling point organic compounds}(\mathsf{below 65 degC}) \\ \end{array}$ 

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask

ether

\* CPI - Chemwatch Performance Index

##ethylene glycol monobutyl

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final

selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Appearance Blue coloured liquid; mixes with water Physical state Liauid Relative density (Water = 1) 09 Partition coefficient Not Available Not Available Odour n-octanol / water Auto-ignition temperature Odour threshold Not Available Not Available (°C) Decomposition pH (as supplied) 6-7 Not Available temperature Melting point / freezing Not Available Viscosity (cSt) Not Available point (°C) Initial boiling point and Not Available Molecular weight (g/mol) Not Applicable boiling range (°C) Flash point (°C) Not Available Taste Not Available Evaporation rate Not Available Explosive properties Not Available Flammability Not Available **Oxidising properties** Not Available Surface Tension (dyn/cm or Not Available Not Available Upper Explosive Limit (%) mN/m) Lower Explosive Limit (%) Volatile Component (%vol) Not Available Not Available Vapour pressure (kPa) Not Available Gas group Not Available Solubility in water (g/L) Miscible pH as a solution (1%) Not Available Vapour density (Air = 1) Not Available VOC g/L Not Available

## SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

## SECTION 11 TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
Skin Contact	The material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Prolonged or repeated skin contact may cause degreasing with drying, cracking and dermatitis following.

is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Auto Klone Auto Emi Meri	TOXICITY	IRRITATION	
Auto Kiene Auto Ezy wax	Not Available	Not Available	
dicocodimethylammonium	TOXICITY	IRRITATION	
chloride	Oral (rat) LD50: 200 mg/kg <sup>[2]</sup>	Not Available	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: 12792 mg/kg <sup>[1]</sup>	Eye (rabbit): 10 mg - moderate	
isopropanol	Inhalation (rat) LC50: 72.6 mg/L/4hr <sup>[2]</sup>	Eye (rabbit): 100 mg - SEVERE	
	Oral (rat) LD50: 5000 mg/kg <sup>[2]</sup>	Eye (rabbit): 100mg/24hr-moderate	
		Skin (rabbit): 500 mg - mild	
quaternary cocoamine	TOVICITY	IDDITATION	
dimethyl sulfate,	Not Available	Not Available	
etiloxylated			
	TOXICITY	IRRITATION	
ethylene glycol monobutyl	dermal (rat) LD50: >2000 mg/kg[ <sup>1</sup> ]	Eye (rabbit): 100 mg SEVERE	
ether	Inhalation (rat) LC50: 450 ppm/4hr <sup>[2]</sup>	Eye (rabbit): 100 mg/24h-moderate	
	Oral (rat) LD50: 250 mg/kg <sup>[2]</sup>	Skin (rabbit): 500 mg, open; mild	
	TOXICITY	IRRITATION	
water	Oral (rat) LD50: >90000 mg/kg <sup>[2]</sup>	Not Available	
		•	
Legend:	<ol> <li>Value obtained from Europe ECHA Registered Substances - Acute toxicity 2 extracted from RTECS - Register of Toxic Effect of chemical Substances</li> </ol>	2.* Value obtained from manufacturer's SDS. Unless otherwise specified data	
DICOCODIMETHYLAMMONIUM CHLORIDE       There is no data that exists regarding the health effects of cationic dialkyldimethylammonium (DADMA) salts, but they are expected to have similar properties to alkyltrimethylammonium (ATMA) salts, although they are generally less irritating than the corresponding ATMA salts For alkyltrimethylammonium (ATMA) salts, although they are generally less irritating than the corresponding ATMA salts         In addition, certain surfactants will satisfy the criteria for classification as Corrosive with R34 in addition to the acute toxicity. According to Centre Europeen des Agents de Surface et de leurs Intermediaires Organiques (CESIO), C8-18 alkyltrimethylammonium chloride (ATMAC) (i.e., lauryl, coco, soya, and tallow) are classified as Corrosive (C) with the risk phrases R22 (Harmful if swallowed) and R34 (Causes C16 ATMAC) is classified as Harmful (Xn) with the risk phrases R22 (Harmful if swallowed), and R34 (Causes C16 ATMAC is classified as Irritant (Xi) with the risk phrases R22 (Harmful if swallowed) and R34 (Causes C16 ATMAC is classified as Irritant (Xi) with the risk phrases R22 (Harmful if swallowed) and R34 (Causes C16 ATMAC is classified as Irritant (Xi) with the R36/38 (Irritating to eyes and skin). Toxokinetics and Acute Toxicity: The few available absorption studies conducted with cationic surfactants indicate that absorption occurs in sm amounts through the skin. Percutaneous absorption of radiolabelled C12 alkyltrimethylammonium bromide (ATMAB) in 3% aqueous solution (appli B cm2 area with occlusion) in the rat was low and corresponded to 0.6% of the applied 14C activity in 72 hours.         Asthma-like symptoms may continue for months or even years after exposure to high heyles of highly irritating compound. Key criteria for diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like sym wi			
ISOPROPANO	Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled. Intentional swallowing is common particularly among alcoholics or suicide victims and also leads to fainting, breathing difficulty, nausea, vomiting and headache. In the absence of unconsciousness, recovery usually occurred. Repeated doses may damage the kidneys. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.		
ETHYLENE GLYCOL       The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may proconjunctivitis.         For ethylene glycol monoalkyl ethers and their acetates (EGMAEs):       Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol heaving and their acetates.         EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes transient metabolites of mono substituted glycol ethers.         Acute Toxicity: Oral LD50 values in rats for all category members range from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increas decreasing molecular weight. Four to six hour acute inhalation toxicity studies were conducted for these chemicals in rats at the highest vap concentrations practically achievable. Values range from LC0 > 85 ppm (508 mg/m3) for EGHE, LC50 > 400ppm (2620 mg/m3) for EGBEA 2132 ppm (9061 mg/m3) for EGPE. No lethality was observed for any of these materials under these conditions.         Exposure of pregnant rats to ethylene glycol monobulyl ether (2-butoxyethanol) at 100 ppm or rabbits at 200 ppm during organogenesis resumatemal toxicity and embryotoxicity including a decreased number of viable implantations per litter. Slight foetoxicity in the form of poorly ossumostified skeletal elements was also apparent in rats. Teratogenic effects were not observed in other species.         At least one researcher has stated that the reproductive effects were less than that of other monoalkyl ethers of ethylene glycol.		I inflammation. Repeated or prolonged exposure to irritants may produce PE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) ch catalyzes the conversion of their terminal alcohols to aldehydes (which are yde dehydrogenase produces alkoxyacetic acids, which are the predominant from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with dies were conducted for these chemicals in rats at the highest vapour 508 mg/m3) for EGHE, LC50 > 400ppm (2620 mg/m3) for EGBEA to LC50 > nese materials under these conditions. tanol) at 100 ppm or rabbits at 200 ppm during organogenesis resulted in le implantations per litter. Slight foetoxicity in the form of poorly ossified or s were not observed in other species. han that of other monoalkyl ethers of ethylene glycol.	

	Chronic exposure may cause anaemia, macrocytosis, abnormally large red cells and abnormal red cell fragility. Exposure of male and female rats and mice for 14 weeks to 2 years produced a regenerative haemolytic anaemia and subsequent effects on the haemopoietic system in rats and mice. In addition, 2-butoxyethanol exposures caused increases in the incidence of neoplasms and nonneoplastic lesions (1). For ethylene glycol: Ethylene glycol is quickly and extensively absorbed through the gastrointestinal tract. Limited information suggests that it is also absorbed through the respiratory tract; dermal absorption is apparently slow. Following absorption, ethylene glycol is distributed throughout the body according to total body water. In most mammalian species, including humans, ethylene glycol is initially metabolised by alcohol. dehydrogenase to form glycolaldehyde, which is rapidly converted to glycolic acid and glyoxal by aldehyde oxidase and aldehyde dehydrogenase. These metabolites are oxidised to glyoxylate; glyoxylate may be further metabolised to formic acid, oxalic acid, and glycine. Breakdown of both glycine and formic acid can generate CO2, which is one of the major elimination products of ethylene glycol. NOTE: Changes in kidney, liver, spleen and lungs are observed in animals exposed to high concentrations of this substance by all routes. ** ASCC (NZ) SDS		
ISOPROPANOL & ETHYLEN GLYCOL MONOBUTYL ETHE	IE The material may cause skin irritation after prolonged scaling and thickening of the skin.	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.	
QUATERNARY COCOAMIN DIMETHYL SULFAT ETHOXYLATED & WATE	No significant acute toxicological data identified in literature search.		
Acute Toxicity	×	Carcinogenicity	$\otimes$
Skin Irritation/Corrosion	×	Reproductivity	$\otimes$
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	<b>√</b>
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0
		Legend: 🗙	<ul> <li>Data available but does not fill the criteria for classification</li> <li>Data required to make classification available</li> </ul>

```
🚫 – Data Not Available to make classification
```

# SECTION 12 ECOLOGICAL INFORMATION

# Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
dicocodimethylammonium chloride	EC50	72	Algae or other aquatic plants	0.148mg/L	2
dicocodimethylammonium chloride	EC50	72	Algae or other aquatic plants	0.386mg/L	2
dicocodimethylammonium chloride	NOEC	840	Fish	0.053mg/L	2
isopropanol	LC50	96	Fish	183.844mg/L	3
isopropanol	EC50	48	Crustacea	12500mg/L	5
isopropanol	EC50	96	Algae or other aquatic plants	993.232mg/L	3
isopropanol	EC50	384	Crustacea	42.389mg/L	3
isopropanol	NOEC	5760	Fish	0.02mg/L	4
ethylene glycol monobutyl ether	LC50	96	Fish	222.042mg/L	3
ethylene glycol monobutyl ether	EC50	48	Crustacea	>1000mg/L	4
ethylene glycol monobutyl ether	EC50	96	Algae or other aquatic plants	1081.644mg/L	3
ethylene glycol monobutyl ether	EC50	384	Crustacea	51.539mg/L	3
ethylene glycol monobutyl ether	NOEC	96	Crustacea	1000mg/L	4
	Extracted from 1 UICLI	D Taviaita Data 2 Everana EOUA Da	ristored Substances Fastaviaslarias Inform	ation Aquatia Taviaity 2 EDIM/I	10:11-10.40

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 -Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

# Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
water	LOW	LOW

### **Bioaccumulative potential**

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
water	LOW (LogKOW = -1.38)

#### Mobility in soil

······································		
Ingredient	Mobility	
isopropanol	HIGH (KOC = 1.06)	
ethylene glycol monobutyl ether	HIGH (KOC = 1)	
water	LOW (KOC = 14.3)	

## SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: F If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product. Product / Packaging DO NOT allow wash water from cleaning or process equipment to enter drains It may be necessary to collect all wash water for treatment before disposal. disposal ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult manufacturer for recycling options. ÷ Consult State Land Waste Authority for disposal. Bury or incinerate residue at an approved site Recycle containers if possible, or dispose of in an authorised landfill.

Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

# **SECTION 14 TRANSPORT INFORMATION**

#### Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

# Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

#### **SECTION 15 REGULATORY INFORMATION**

#### Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002624	N.O.S. (Subsidiary Hazard) Group Standard 2006
HSR002535	Compressed Gas Mixtures (Subsidiary Hazard) Group Standard 2006
HSR002596	Laboratory Chemicals and Reagent Kits Group Standard 2006
HSR002530	Cleaning Products (Subsidiary Hazard) Group Standard 2006
HSR002585	Fuel Additives (Subsidiary Hazard) Group Standard 2006
HSR002519	Aerosols (Subsidiary Hazard) Group Standard 2006
HSR002521	Animal Nutritional and Animal Care Products Group Standard 2006
HSR002606	Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2006
HSR002644	Polymers (Subsidiary Hazard) Group Standard 2006
HSR002647	Reagent Kits Group Standard 2006
HSR002612	Metal Industry Products (Subsidiary Hazard) Group Standard 2006
HSR002670	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006
HSR002503	Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006
HSR002638	Photographic Chemicals (Subsidiary Hazard) Group Standard 2006

HSR002565	Embalming Products (Subsidiary Hazard) Group Standard 2006
HSR002578	Food Additives and Fragrance Materials (Subsidiary Hazard) Group Standard 2006
HSR002558	Dental Products (Subsidiary Hazard) Group Standard 2006
HSR002684	Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2006
HSR002573	Fire Fighting Chemicals Group Standard 2006
HSR100425	Pharmaceutical Active Ingredients Group Standard 2010
HSR002600	Leather and Textile Products (Subsidiary Hazard) Group Standard 2006
HSR002571	Fertilisers (Subsidiary Hazard) Group Standard 2006
HSR002648	Refining Catalysts Group Standard 2006
HSR002653	Solvents (Subsidiary Hazard) Group Standard 2006
HSR002544	Construction Products (Subsidiary Hazard) Group Standard 2006
HSR002549	Corrosion Inhibitors (Subsidiary Hazard) Group Standard 2006
HSR002552	Cosmetic Products Group Standard 2006
HSR100757	Veterinary Medicine (Limited Pack Size, Finished Dose) Standard 2012
HSR100758	Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2012
HSR100759	Veterinary Medicines (Non-dispersive Open System Application) Group Standard 2012
HSR100628	Straight-chained Lepidopteran Sex Pheromone Group Standard 2012

### DICOCODIMETHYLAMMONIUM CHLORIDE(61789-77-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

### ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC
Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of
Chemicals

New Zealand Inventory of Chemicals (NZIoC) New Zealand Workplace Exposure Standards (WES)

### QUATERNARY COCOAMINE DIMETHYL SULFATE, ETHOXYLATED(68989-03-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

### ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC) New Zealand Workplace Exposure Standards (WES)

## WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

#### **Location Test Certificate**

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

#### **Approved Handler**

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

#### **Tracking Requirements**

Not Applicable

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (dicocodimethylammonium chloride; quaternary cocoamine dimethyl sulfate, ethoxylated; water; isopropanol; ethylene glycol monobutyl ether)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (quaternary cocoamine dimethyl sulfate, ethoxylated)
Japan - ENCS	N (dicocodimethylammonium chloride; quaternary cocoamine dimethyl sulfate, ethoxylated; water)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	N (quaternary cocoamine dimethyl sulfate, ethoxylated)
USA - TSCA	Υ

Legend:

Y = All ingredients are on the inventory

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

## **SECTION 16 OTHER INFORMATION**

#### Other information

### Ingredients with multiple cas numbers

Name	CAS No
dicocodimethylammonium chloride	61789-77-3, 68391-05-9
quaternary cocoamine dimethyl sulfate, ethoxylated	68989-03-7, 197664-72-5, 307315-38-4

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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