

Clark Products Limited

Version No: **1.2** Safety Data Sheet according to HSNO Regulations Chemwatch Hazard Alert Code: 3

Issue Date: 08/09/2014 Print Date: 11/08/2016 S.GHS.NZL.EN

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

Product Identifier

Product name	SMOOCHY
Synonyms	ASX3050
Other means of identification	Not Available

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

Relevant identified uses Fabric softener

Details of the supplier of the safety data sheet

Registered company name	Clark Products Limited	
Address	4 Niven Street Onekawa Napier New Zealand	
Telephone	+0800 66 66 33	
Fax	+64 6 8432958	
Website	www.orders@clarkproducts.co.nz	
Email	orders@clarkproducts.co.nz	

Emergency telephone number

Association / Organisation	CHEMCALL (0800 CHEMCALL)	
Emergency telephone numbers	0800 243 622	
Other emergency telephone numbers	1800 243 622 (outside New Zealand)	

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	0		
Toxicity	0		0 = Minimum
Body Contact	3		1 = Low
Reactivity	0		3 = High
Chronic	0		4 = Extreme

H318

H402

Causes serious eye damage.

Harmful to aquatic life

Classification ^[1]	Skin Corrosion/Irritation Category 3, Serious Eye Damage Category 1, Acute Aquatic Hazard Category 3	
Legend:	1. Classified by Chernwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria	6.3B, 8.3A, 9.1D	
Label elements		
GHS label elements	Le	
SIGNAL WORD	DANGER	
Hazard statement(s)		
H316	Causes mild skin irritation	

Precautionary statement(s) Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.

Precautionary statement(s) Response

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 or doctor/physician.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501 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
7732-18-5	>90	water
61789-80-8	1-10	ditallowdimethylammonium chloride, hydrogenated

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. 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. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. If poisoning occurs, contact a doctor or Poisons Information Centre.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.		
Advice for firefighters	Advice for firefighters		
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. 		
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. May emit poisonous fumes.May emit corrosive fumes. 		

SECTION 6 ACCIDENTAL RELEASE MEASURES

Page 3 of 9

SMOOCHY

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite.
Major Spills	 Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT allow clothing wet with material to stay in contact with skin
Other information	
Conditions for safe storag	e, including any incompatibilities
	Polyethylene or polypropylene container.

Suitable container	 Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name TEEL-1		TEEL-2	TEEL-3
SMOOCHY	Not Available Not Available		Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH	
water	Not Available		Not Available	
ditallowdimethylammonium chloride, hydrogenated	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.
Personal protection	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. 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.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber 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. 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.

	Suitability and durability of glove type is dependent on usage.
Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
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 computer-generated selection:

SMOOCHY

Material	СРІ
BUTYL	A
NEOPRENE	A
VITON	A
NATURAL RUBBER	С
PVA	С

* CPI - Chemwatch Performance Index

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	Opaque, turquoise-blue liquid		
Physical state	Liquid	Relative density (Water = 1)	0.99
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	0	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Applicable	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 Applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
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	The material is not thought to produce adverse health effects or irritation of the Nevertheless, good hygiene practice requires that exposure be kept to a minimu Not normally a hazard due to non-volatile nature of product	respiratory tract (as classified by EC Directives using animal models). Im and that suitable control measures be used in an occupational setting.	
Ingestion	The material has NOT been classified by EC Directives or other classification spanimal or human evidence.	ystems as "harmful by ingestion". This is because of the lack of corroborating	
Skin Contact	Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. 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	If applied to the eyes, this material causes severe eye damage.		
Chronic	Substance accumulation, in the human body, may occur and may cause some or There is some evidence that inhaling this product is more likely to cause a sens	oncern following repeated or long-term occupational exposure. itisation reaction in some persons compared to the general population.	
SMOOCHY	TOXICITY	IRRITATION	
SMOUCHT	Not Available	Not Available	
	TOXICITY	IRRITATION	
water	Oral (rat) LD50: >90000 mg/kg ^[2]	Not Available	
ditallowdimethylammonium	TOXICITY	IRRITATION	
chloride, hydrogenated	Oral (rat) LD50: >9850 mg/kg ^[2]	Eye (rabbit): 100 mg - mild	
		*)(
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		

Fatty Nitrogen-Derived Cationics (FND Cationics) have minimal to moderate acute toxicity but may be acutely lethal at very high doses. Repeated exposure also is associated with low toxicity. They are unlikely to cause mutation or affect reproduction, cause birth defects or development of the unbom

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 chloride (ATMAC)

Most undiluted cationic surfactants satisfy the criteria for classification as Harmful (Xn) with R22 and as Irritant (Xi) for skin and eyes with R38 and R41. 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 burns). C16 ATMAC is classified as Harmful (Xn) with the risk phrases R22 (Harmful if swallowed), R38 (Irritating to skin), and R41 (Risk of serious damage to eyes). C20-22 ATMAC are classified as Irritant (Xi) with 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 small amounts through the skin. Percutaneous absorption of radiolabelled C12 alkyltrimethylammonium bromide (ATMAB) in 3% aqueous solution (applied to an 8 cm2 area with occlusion) in the rat was low and corresponded to 0.6% of the applied 14C activity in 72 hours. Most of the absorbed surfactant was excreted in the urine, i.e. 0.35% of the applied 14C activity within the first 24 hours, whereas 13.2% remained on the skin after rinsing. Cutaneous application of the surfactant without rinsing resulted in a greater degree of percutaneous absorption (3.15%) in 48 hours. In the rat elimination after parenteral administration was rapid and was effected primarily via the urine, - more than 80% of the radioactivity was eliminated within 24 hours of application. About 80% of the 14C activity was found in the gastrointestinal tract 8 hours after oral administration of 14C-labelled C16 ATMAB. Only small amounts of 14C were found in the liver, kidneys, spleen, heart, lungs and skeletal muscles. Within 3 days of ingestion, 92% of the administrated radioactivity had been excreted in the faces and 1% in the urine. No appreciable enterohepatic circulation of the radioactivity was found. The acute oral toxicity of alkyltrimethylammonium salts is somewhat higher than the toxicity of anionic surfactants. This may be due to the strongly irritating effect which cationic surfactants exhibit on the mucous membrane of the gastrointestinal tract (SFT 1991). Cationic surfactants are onerelly wab to times more toxic when administrated by the intravenous route compared to oral administration.

DITALLOWDIMETHYLAMMONIUM CHLORIDE, HYDROGENATED

Skin and Eye Irritation: Skin irritation depends on surfactant concentration. Regardless of the structure, cationic surfactants lead to serious destruction of the skin at high concentrations. Solutions of approximately 0.1% are rarely irritating, whereas irritation is usually pronounced at concentrations between 1.0 and 10.0% surfactant. C16 ATMAC was severely irritating to rabbit skin in a concentration of 2.5%. The surfactant was applied to intact and abraded sites and scored after 34 hours. Then the skin was rinsed and then scored again after 48 hours. The erythema and Eschar Index was 3.75 (maximum 4) and the edema Index was 2.0 (maximum 4).

With regard to eye irritation, cationic surfactants are the most irritating of the surfactants. The longer chained alkyltrimethylammonium salts are less irritating to the rabbit eye than the shorter alkyl chain homologues. C10 ATMAB, C12 ATMAB, and C16 ATMAC were tested in concentrations between 0.1 and 1.0% in water and were found to be significantly irritating or injurious to the rabbit eye. A 5% solution of C18 ATMAC was instilled into the eyes of guinea pigs, and this concentration was very irritating with a total PII (The Primary Irritation Index) score of 96 (maximum 110). A homologous series of ATMAB produced very little swelling of the stratum corneum and some homologues produced a shrinkage of the stratum corneum after prolonged exposure.

Many proteins in the skin are considerably more resistant to the denaturating effects of cationic surfactants compared to those of anionic surfactants. As cationic surfactants frequently have a lower critical micelle concentration than the anionic surfactants, a saturation of the surfactant/protein complex is prevented by the formation of micelles.

Compared to a representative anionic surfactant, the cooperative binding with subsequent protein denaturation requires about a tenfold higher concentration of a cationic surfactant. Contrary to the irreversible denaturating effect of sodium dodecyl sulfate, the adverse effects of some cationic surfactants on proteins may be reversible. Cationic surfactants can interact with proteins or peptides by polar and hydrophobic binding. Polar interactions result in electrostatic bonds between the negatively charged groups of the protein molecule and the positively charged surfactant molecule. **Sensitisation**: A repeated insult patch test of C16 ATMAC was conducted with 114 volunteers. Seventeen days after the last induction of 0.25% surfactant, a challenge patch of 0.25% was applied. No sensitization was observed.

Sub-chronic toxicity: C16 ATMAB was administered at concentrations of 10, 20, and 45 mg/kg/day via the drinking water to rats for one year. The only effect observed was a decrease in body weight gain in the 45 mg/day dose group.

Reproductive Toxicity: No embryo toxic effects were seen, when C18 ATMAC was applied dermally to pregnant rats during the period of major organogenesis (day 6-15 of gestation). The concentrations of C18 ATMAC were 0.9, 1.5 and 2.5%. There was no increase in the incidence of fetal malformations. C16 ATMAB was not teratogenic in rats after oral doses. Mild embryonic effects were observed with 50 mg/kg/day, but these effects were attributed to maternal toxicity rather than to a primary embryonic effect. Lower doses of C16 ATMAB showed no embryo toxic or teratogenic effects.

		Mutagenicity: C16 ATMAC was studied in in vitro sho cells were used for an in vitro bioassay. No in vitro tran in <i>Salmonella typhimurium</i> (Inoue and Sunakawa 1980) genotoxicity tests with C16 and C18 ATMAC (Yam et al Environmental and Health Assessment of Substances Torben Madsen et al: Miljoministeriet (Danish Environ For quaternary ammonium compounds (QACs): Quaternary ammonium compounds (QACs) are catior R substituents are alkyl or heterocyclic radicals. A con hydrophobic aliphatic residue. The cationic surface active compounds are in general	ort-term tests to detect potential mut sformation of hamster embryo cells)). No mutagenic effects or genetic d al. 1984). in Household Detergents and Cosm mental Protection Agency) nic surfactants. They are synthetic or nmon characteristic of these synthet more toxic than the anionic and nor	agenic effects. Cultures of Syrian golden hamster embryo was induced, and C16 ATMAC was not mutagenic amages were indicated in a survey of nine short-term hetic Detergent Products, Environment Project, 615, 2001. ganically tetra-substituted ammonium compounds, where the ic compounds is that one of the R's is a long-chain h-ionic surfactants. The positively-charged cationic portion is
		the functional part of the molecule and the local irritatic Due to their relative ability to solubilise phospholipids a Further QACs denature proteins as cationic materials It has been suggested that the experimentally determine	on effects of QACs appear to result f and cholesterol in lipid membranes, precipitate protein and are accomp ned decrease in acute toxicity of QA	rom the quaternary ammonium cation. QACs affect cell permeability which may lead to cell death. anied by generalised tissue irritation. Cs with chain lengths above C16 is due to decreased water
		solubility. In general it appears that QACs with a single long-cha The straight chain aliphatic QACs have been shown to chloride have shown that the effect on histamine release rats were exposed to low concentrations, a decrease in obtained	ain alkyl groups are more toxic and i o release histamine from minced gui se depends on the concentration of i n histamine release was seen. When	rritating than those with two such substitutions, nea pig lung tissue. However, studies with benzalkonium he solution. When cell suspensions (11% mast cells) from n exposed to high concentrations the opposite result was
		In addition, QACs may show curare-like properties (sp of the central nervous system. This is most often assoc transient limb paralysis and sometimes fatal paresis of From human testing of different QACs the generalised properties	ecifically benzalkonium and cetylpyri ciated with lethal doses. Parenteral i f the respiratory muscles. This effect d conclusion is obtained that all the c	dinium derivatives, a muscular paralysis with no involvement njections in rats, rabbits and dogs have resulted in prompt but seems to be transient. compounds investigated to date exhibit similar toxicological
		The material may be irritating to the eye, with prolonge conjunctivitis. The material may cause skin irritation after prolonged over vesicles, scaling and thickening of the skin.	d contact causing inflammation. Report of the transmission of transmission of the transmission of the transmission of transmission	beated or prolonged exposure to irritants may produce uce on contact skin redness, swelling, the production of
		Asthma-like symptoms may continue for months or ever known as reactive airways dysfunction syndrome (RAI for the diagnosis of RADS include the absence of prec symptoms within minutes to hours of a documented ex- severe bronchial hyperreactivity on methacholine chall been included in the criteria for diagnosis of RADS. R the concentration of and duration of exposure to the in exposure due to high concentrations of irritating subst disorder is characterised by dyspnea, cough and muct Tallow derivatives used in the manufacture of cosmeti 200 \oplus C, under pressure for 20 minutes (for glycerol, fc hours; continuous process at 140 \oplus C, for about 8 min Inhalation (-) LC50: >180000 mg/m3/h * - Changes in I a NOAEL > 100 mg/kg/day, the highest dose tested. Ti other toxic effects were noted. Following 90 days of do found in the excreta of males and 6% in excreta of fen	en years after exposure to the materi DS) which can occur following expo- ceding respiratory disease, in a non- yosure to the irritant. A reversible ai enge testing and the lack of minimal RADS (or asthma) following an irritar itating substance. Industrial bronchi ance (often particulate in nature) and us production. c products are safe for consumption atty acids and esters) ; saponificatio utes or its equivalent. liver weight recorded. For CAS RN 6 here were no effects related to toxici sing 2800 ppm of this chemical in the nales. * FND Cationics HPV Chemic	al ceases. This may be due to a non-allergenic condition sure to high levels of highly irritating compound. Key criteria atopic individual, with abrupt onset of persistent asthma-like flow pattern, on spirometry, with the presence of moderate to lymphocytic inflammation, without eosinophilia, have also ing inhalation is an infrequent disorder with rates related to tis, on the other hand, is a disorder that occurs as result of d is completely reversible after exposure ceases. The when it undergoes- transesterification or hydrolysis at n with 12 M of NaOH (for glycerol and soap) at 95 � C for 3 \$1789-80-8, a 90-day toxicity study in dogs was reported with ty of the test substance in this study. Skin irritation but no e diet of rats, approximately 16% of the consumed dose was ials Challenge Test Plan US EPA 2001
SMOOCHY & WA	AIER	No significant acute toxicological data identified in lite	erature search.	
Acute Toxicity	\odot		Carcinogenicity	0
Skin Irritation/Corrosion	~		Reproductivity	0
Serious Eye Damage/Irritation	*		STOT - Single Exposure	0
Respiratory or Skin sensitisation	\odot		STOT - Repeated Exposure	0
Mutagenicity	\bigcirc		Aspiration Hazard	\otimes

Legend:

Data available but does not fill the criteria for classification
 Data required to make classification available

S – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
water	EC50	384	Crustacea	199.179mg/L	3
water	EC50	96	Algae or other aquatic plants	8768.874mg/L	3
water	LC50	96	Fish	897.520mg/L	3
ditallowdimethylammonium chloride, hydrogenated	EC50	48	Crustacea	=0.32mg/L	1
ditallowdimethylammonium chloride, hydrogenated	EC10	93	Algae or other aquatic plants	<0.0056mg/L	1
ditallowdimethylammonium chloride, hydrogenated	EC50	72	Algae or other aquatic plants	=0.00046mg/L	1
ditallowdimethylammonium chloride, hydrogenated	NOEC	72	Algae or other aquatic plants	=0.00016mg/L	1
ditallowdimethylammonium chloride, hydrogenated	LC50	96	Fish	=1mg/L	1

Page 7 of 9	Issue Date: 08/09/2014
SMOOCHY	Print Date: 11/08/2016

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
Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Toxic to aquatic organisms.

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.

For Fatty Nitrogen-Derived Cationics (FND Cationics): Log Kow: <5.

Environmental Fate: Because of their closely-related structures, FND cationics possess similar environmental fate and ecotoxicity across the category.

Atmospheric Fate: FND cationics are not expected to evaporate in the atmosphere and it is predicted that these substances will not move into the atmospheric compartment. Nonetheless, modelling of these and similar substances indicates that these chemicals would be expected to degrade relatively rapidly upon exposure to light, with half-lives ranging from approximately 2.8-5.9 hours.

for Quaternary Ammonium Compounds (QAC's): QAC's are white, crystalline powders. Low molecular weight QACs are very soluble in water, but slightly or not at all soluble in solvents such as ether, petrol and benzene. As the molecular weight and chain lengths increases, the solubility in polar solvents (e.g. water) decreases and the solubility in non-polar solvents increases. Environmental Fate: A major part of the QACs is discharged into wastewater and removed in the biological processes of sewage treatment, however; the aerobic and anaerobic biodegradability of QACs is not well investigated.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
water	LOW (LogKOW = -1.38)
ditallowdimethylammonium chloride, hydrogenated	LOW (BCF = 13)

Mobility in soil

Ingredient	Mobility
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some
areas, certain wastes must be tracked.
A Hierarchy of Controls seems to be common - the user should investigate:
▶ Reduction
▶ Reuse
▶ Recycling
▶ Disposal (if all else fails)
This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.
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.
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.
Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility
can be identified.
Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after
admixture with suitable combustible material).
Decontaminate empty containers.

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

Page 8 of 9

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
HSR002530	Cleaning Products (Subsidiary Hazard) Group Standard 2006

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

New Zealand Inventory of Chemicals (NZloC)

DITALLOWDIMETHYLAMMONIUM CHLORIDE, HYDROGENATED(61789-80-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of	New Zealand Inventory of Chemicals (NZIoC)
Chemicals	

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 (water; ditallowdimethylammonium chloride, hydrogenated)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (water; ditallowdimethylammonium chloride, hydrogenated)
Korea - KECI	Y
New Zealand - NZIoC	Υ
Philippines - PICCS	Y
USA - TSCA	Y
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
ditallowdimethylammonium chloride, hydrogenated	61789-80-8, 60569-67-7, 92129-33-4

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.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.