

WIPES MEDI DISINFECTANT TOWELETTES TUB/160

Officemax

Chemwatch: 35-7452

Version No: 4.1.1.1

Safety Data Sheet according to HSNO Regulations

Issue Date: 01/11/2019

Print Date: 15/07/2020

S.GHS.NZL.EN

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

Product Identifier

Product name	WIPES MEDI DISINFECTANT TOWELETTES TUB/160
Synonyms	Part Number: 2327473; WIPES MEDI DISINFECTANT TOWELETTES TUB/160
Proper shipping name	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (contains ethanol)
Other means of identification	Not Available

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

Relevant identified uses	Medicated wipes.
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Details of the supplier of the safety data sheet

Registered company name	Officemax
Address	30 Sir Woolf Fisher Drive East Tamaki Manukau New Zealand
Telephone	0800 426 473
Fax	0800 226 473
Website	www.officemax.co.nz
Email	enquiries@officemax.co.nz

Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+64 800 700 112
Other emergency telephone numbers	+61 2 9186 1132





Once connected and if the message is not in your preferred language then please dial 01

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. Classified as Dangerous Goods for transport purposes.



CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	3	
Toxicity	1	
Body Contact	2	
Reactivity	1	
Chronic	0	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Classification ^[1]	Flammable Solid Category 1, Skin Corrosion/Irritation Category 3, Eye Irritation Category 2, Skin Sensitizer Category 1, Acute Aquatic Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	4.1.1A, 6.3B, 6.4A, 6.5B (contact), 9.1D

Label elements

Hazard pictogram(s)	 
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SIGNAL WORD	DANGER
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Hazard statement(s)

H228	Flammable solid.
H316	Causes mild skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H402	Harmful to aquatic life.

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.

Precautionary statement(s) Response

P321	Specific treatment (see advice on this label).
P370+P378	In case of fire: Use water jets to extinguish.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64-17-5	70	<u>ethanol</u>
18472-51-0	0.5	<u>chlorhexidine gluconate</u>
57-09-0	0.16	<u>cetyltrimethylammonium bromide</u>
7732-18-5	balance	<u>water</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with fresh 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. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prosthesis such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor.

Ingestion	<ul style="list-style-type: none"> ▶ If swallowed do NOT induce vomiting. ▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. ▶ Observe the patient carefully. ▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. ▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▶ Seek medical advice.
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Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to ethanol:

- ▶ Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- ▶ Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
- ▶ Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
- ▶ Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
- ▶ Fructose administration is contra-indicated due to side effects.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ Alcohol stable foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

For **SMALL FIRES**:

Dry chemical, CO₂, water spray or foam.

For **LARGE FIRES**:

Water-spray, fog or foam.

Special hazards arising from the substrate or mixture

Fire Incompatibility	<ul style="list-style-type: none"> ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water course. ▶ Fight fire from a safe distance, with adequate cover.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Combustible. ▶ Slight fire hazard when exposed to heat or flame. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ On combustion, may emit toxic fumes of carbon monoxide (CO). <p>Combustion products include: carbon dioxide (CO₂) other pyrolysis products typical of burning organic material.</p>

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 style="list-style-type: none"> ▶ Remove all ignition sources. ▶ DO NOT touch or walk through spilled material. ▶ Clean up all spills immediately. ▶ Avoid contact with skin and eyes.
Major Spills	<ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ DO NOT touch or walk through spilled material. ▶ Control personal contact with the substance, by using protective equipment.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of overexposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps.
Other information	<p>FOR MINOR QUANTITIES:</p> <ul style="list-style-type: none"> ▶ Store in an indoor fireproof cabinet or in a room of noncombustible construction. ▶ Provide adequate portable fire-extinguishers in or near the storage area. <p>FOR PACKAGE STORAGE:</p> <ul style="list-style-type: none"> ▶ Store in original containers in approved flame-proof area. ▶ No smoking, naked lights, heat or ignition sources.

Conditions for safe storage, including any incompatibilities

Suitable container	<p>For low viscosity materials and solids: Drums and jerricans must be of the non-removable head type. Where a can is to be used as an inner package, the can must have a screwed enclosure.</p> <p>For materials with a viscosity of at least 2680 cSt. (23 deg. C):</p> <ul style="list-style-type: none"> ▶ Removable head packaging and ▶ cans with friction closures may be used.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates. ▶ Avoid strong bases.

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)	ethanol	Ethyl alcohol (Ethanol)	1000 ppm / 1880 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethanol	Ethanol: (Ethyl alcohol)	Not Available	Not Available	15000* ppm
cetyltrimethylammonium bromide	Ammonium, hexadecyltrimethyl-, bromide; (Hexadecyltrimethylammonium bromide)	1.2 mg/m3	14 mg/m3	81 mg/m3


Ingredient	Original IDLH	Revised IDLH
ethanol	3,300 ppm	Not Available
chlorhexidine gluconate	Not Available	Not Available
cetyltrimethylammonium bromide	Not Available	Not Available
water	Not Available	Not Available

OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
chlorhexidine gluconate	E	≤ 0.1 ppm
cetyltrimethylammonium bromide	E	≤ 0.01 mg/m³

Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.
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Exposure controls

Appropriate engineering controls	<p>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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p>
Personal protection	

Eye and face protection	<ul style="list-style-type: none"> ▸ 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	<p>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.</p> <p>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.</p> <p>Personal hygiene is a key element of effective hand care.</p> <ul style="list-style-type: none"> ▸ Wear physical protective gloves, e.g. leather. ▸ Wear safety footwear.
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▸ Overalls. ▸ Eyewash unit. ▸ Barrier cream. ▸ Skin cleansing cream. ▸ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. ▸ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). ▸ Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds.

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:
 WIPES MEDI DISINFECTANT TOWELETTES TUB/160

Material	CPI
BUTYL	A
NEOPRENE	A
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C
VITON	C

* 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.

Respiratory protection

Type A-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	Air-line*	A-2 P2	A-PAPR-2 P2 ^
up to 10 x ES	-	A-3 P2	-
10+ x ES	-	Air-line**	-

* - Continuous Flow; ** - Continuous-flow or positive pressure demand
 ^ - Full-face
 A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- 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 is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Highly flammable clear slightly yellow liquid absorbed onto wipes; liquid is soluble in water.		
Physical state	Manufactured	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available

pH (as supplied)	5.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	78 (ethanol)	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	13 (ethanol)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	100
Vapour pressure (kPa)	5.3 @ 20C (ethanol)	Gas group	Not Available
Solubility in water	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 style="list-style-type: none"> ▶ 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	<p>Not normally a hazard due to non-volatile nature of product</p> <p>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.</p> <p>Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.</p>
Ingestion	<p>Considered an unlikely route of entry in commercial/industrial environments</p> <p>Accidental ingestion of the material may be damaging to the health of the individual.</p>
Skin Contact	<p>The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p>
Eye	<p>Direct contact of the eye with ethanol (alcohol) may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the cornea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment.</p>
Chronic	<p>Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.</p>

WIPES MEDI DISINFECTANT TOWELETTES TUB/160	TOXICITY	IRRITATION
	Not Available	Not Available
ethanol	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 124.7 mg/l/4H ^[2]	Eye (rabbit): 500 mg SEVERE
	Oral (rat) LD50: =1501 mg/kg ^[2]	Eye (rabbit):100mg/24hr-moderate
		Eye: adverse effect observed (irritating) ^[1]
		Skin (rabbit):20 mg/24hr-moderate
		Skin (rabbit):400 mg (open)-mild
chlorhexidine gluconate	TOXICITY	IRRITATION
	Oral (rat) LD50: 2000 mg/kg ^[2]	Not Available

cetyltrimethylammonium bromide	TOXICITY	IRRITATION
	Oral (rat) LD50: 410 mg/kg ^[2]	Eye (rabbit): 450 mg - SEVERE
water	TOXICITY	IRRITATION
	Oral (rat) LD50: >90000 mg/kg ^[2]	Not Available
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	

ETHANOL	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.
CHLORHEXIDINE GLUCONATE	<p>The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important.</p> <p>Animal studies show that chlorhexidine diacetate has mild to moderate toxicity on skin contact, swallowing or inhalation ♦ it was shown to cause liver damage. In repeat eye irritation studies, though, the chemical is severely toxic. It has not been shown to cause mutations, developmental toxicity or birth defects.</p>
CETYLTRIMETHYLAMMONIUM BROMIDE	<p>For alkyltrimethylammonium chloride (ATMAC)</p> <p>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.</p> <p>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).</p> <p>Acute toxicity: ATMAC (the bromide) is poorly absorbed through the skin or the digestive tract.</p> <p>The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.</p>
WATER	No significant acute toxicological data identified in literature search.

Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✓	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

WIPES MEDI DISINFECTANT TOWELETES TUB/160	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
ethanol	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	11-mg/L	2
	EC50	48	Crustacea	2mg/L	4
	EC50	96	Algae or other aquatic plants	17.921mg/L	4
	NOEC	2016	Fish	0.000375mg/L	4

chlorhexidine gluconate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	2.08mg/L	2
	EC50	48	Crustacea	0.087mg/L	2
	EC50	72	Algae or other aquatic plants	0.011mg/L	2
	BCF	24	Algae or other aquatic plants	0.05mg/L	4
	NOEC	72	Algae or other aquatic plants	0.007mg/L	2
cetyltrimethylammonium bromide	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	ca.0.1mg/L	2
	EC50	48	Crustacea	0.016mg/L	2
	EC50	72	Algae or other aquatic plants	0.00411mg/L	2
	NOEC	72	Algae or other aquatic plants	0.0011mg/L	2
water	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	897.520mg/L	3
	EC50	96	Algae or other aquatic plants	8768.874mg/L	3
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - 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				

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
cetyltrimethylammonium bromide	LOW	LOW
water	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
ethanol	LOW (LogKOW = -0.31)
cetyltrimethylammonium bromide	MEDIUM (BCF = 741)
water	LOW (LogKOW = -1.38)

Mobility in soil

Ingredient	Mobility
ethanol	HIGH (KOC = 1)
cetyltrimethylammonium bromide	LOW (KOC = 162300)
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> ▶ 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 licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material) ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
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Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.
 The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no

longer hazardous.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	1Z

Land transport (UN)

UN number	3175				
UN proper shipping name	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (contains ethanol)				
Transport hazard class(es)	<table><tr><td>Class</td><td>4.1</td></tr><tr><td>Subrisk</td><td>Not Applicable</td></tr></table>	Class	4.1	Subrisk	Not Applicable
Class	4.1				
Subrisk	Not Applicable				
Packing group	II				
Environmental hazard	Not Applicable				
Special precautions for user	<table><tr><td>Special provisions</td><td>216; 274</td></tr><tr><td>Limited quantity</td><td>1 kg</td></tr></table>	Special provisions	216; 274	Limited quantity	1 kg
Special provisions	216; 274				
Limited quantity	1 kg				

Air transport (ICAO-IATA / DGR)

UN number	3175														
UN proper shipping name	Solids containing flammable liquid, n.o.s. * (contains ethanol)														
Transport hazard class(es)	<table><tr><td>ICAO/IATA Class</td><td>4.1</td></tr><tr><td>ICAO / IATA Subrisk</td><td>Not Applicable</td></tr><tr><td>ERG Code</td><td>3L</td></tr></table>	ICAO/IATA Class	4.1	ICAO / IATA Subrisk	Not Applicable	ERG Code	3L								
ICAO/IATA Class	4.1														
ICAO / IATA Subrisk	Not Applicable														
ERG Code	3L														
Packing group	II														
Environmental hazard	Not Applicable														
Special precautions for user	<table><tr><td>Special provisions</td><td>A46</td></tr><tr><td>Cargo Only Packing Instructions</td><td>448</td></tr><tr><td>Cargo Only Maximum Qty / Pack</td><td>50 kg</td></tr><tr><td>Passenger and Cargo Packing Instructions</td><td>445</td></tr><tr><td>Passenger and Cargo Maximum Qty / Pack</td><td>15 kg</td></tr><tr><td>Passenger and Cargo Limited Quantity Packing Instructions</td><td>Y441</td></tr><tr><td>Passenger and Cargo Limited Maximum Qty / Pack</td><td>5 kg</td></tr></table>	Special provisions	A46	Cargo Only Packing Instructions	448	Cargo Only Maximum Qty / Pack	50 kg	Passenger and Cargo Packing Instructions	445	Passenger and Cargo Maximum Qty / Pack	15 kg	Passenger and Cargo Limited Quantity Packing Instructions	Y441	Passenger and Cargo Limited Maximum Qty / Pack	5 kg
Special provisions	A46														
Cargo Only Packing Instructions	448														
Cargo Only Maximum Qty / Pack	50 kg														
Passenger and Cargo Packing Instructions	445														
Passenger and Cargo Maximum Qty / Pack	15 kg														
Passenger and Cargo Limited Quantity Packing Instructions	Y441														
Passenger and Cargo Limited Maximum Qty / Pack	5 kg														

Sea transport (IMDG-Code / GGVSee)

UN number	3175						
UN proper shipping name	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (contains ethanol)						
Transport hazard class(es)	<table><tr><td>IMDG Class</td><td>4.1</td></tr><tr><td>IMDG Subrisk</td><td>Not Applicable</td></tr></table>	IMDG Class	4.1	IMDG Subrisk	Not Applicable		
IMDG Class	4.1						
IMDG Subrisk	Not Applicable						
Packing group	II						
Environmental hazard	Not Applicable						
Special precautions for user	<table><tr><td>EMS Number</td><td>F-A , S-I</td></tr><tr><td>Special provisions</td><td>216 274</td></tr><tr><td>Limited Quantities</td><td>1 kg</td></tr></table>	EMS Number	F-A , S-I	Special provisions	216 274	Limited Quantities	1 kg
EMS Number	F-A , S-I						
Special provisions	216 274						
Limited Quantities	1 kg						

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
HSR002692	Laboratory Chemicals and Reagent Kits (Class 4) Group Standard 2017
HSR002522	Class 4 Substances Group Standard 2017

ETHANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Approved Hazardous Substances with controls	New Zealand Inventory of Chemicals (NZIoC)
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals	New Zealand Workplace Exposure Standards (WES)
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data	

CHLORHEXIDINE GLUCONATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

CETYLTRIMETHYLAMMONIUM BROMIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

WATER IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)
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Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
4.1.1A	1 kg	1 kg

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
4.1.1A	100 kg

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AICS	Yes
Canada - DSL	Yes
Canada - NDSL	No (ethanol; chlorhexidine gluconate; cetyltrimethylammonium bromide; water)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (chlorhexidine gluconate)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (chlorhexidine gluconate)
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - ARIPS	Yes

Legend:

Yes = All CAS declared ingredients are on the inventory

No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	01/11/2019
Initial Date	21/05/2013

SDS Version Summary

Version	Issue Date	Sections Updated
3.1.1.1	04/12/2017	Classification
4.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

Other information

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.

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

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