Sanicare Plus Sani-Plus Hospital Grade Disinfectant (Eucalyptus Fragrance) LEFT PILLAR PTY LTD TA'S SHIELD CHEMICALS

Chemwatch: 5471-83

Version No: 4.1 Print Date: 09/12/2021 Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Sanicare Plus Sani-Plus Hospital Grade Disinfectant (Eucalyptus Fragrance)	
Chemical Name	ot Applicable	
Synonyms	SC19	
Chemical formula	Not Applicable	
Other means of identification	Not Available	

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

Relevant identified uses	Sani-Plus SC19 Hospital grade Disinfectant Dirty Conditions, formulated to be effective against germs, bacteria and the SARS-CoV-2 COVID19 virus.
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Details of the supplier of the safety data sheet

Registered company name	LEFT PILLAR PTY LTD TA'S SHIELD CHEMICALS		
Address	Unit 3/20 Badgally Rd, Campbelltown, Sydney NSW, 2560 Australia		
Telephone	+61 1300 519 074		
Fax	Not Available		
Website	www.krystalshield.com.au		
Email	info@krystalshield.com.au		

Emergency telephone number

Association / Organisation	LEFT PILLAR PTY LTD TA'S SHIELD CHEMICALS	
Emergency telephone numbers	+61 1300 519 074	
Other emergency telephone numbers	Not Available	

SECTION 2 Hazards identification

Classification of the substance or mixture		
Poisons Schedule	Not Applicable	
Classification ^[1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Hazardous to the Aquatic Environment Acute Hazard Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	

Label elements

Hazard pictogram(s)	<



Signal word Warning

Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H402	Harmful to aquatic life.

Precautionary statement(s) Prevention

P273	Avoid release to the environment.	
P280	Wear protective gloves, protective clothing, eye protection and face protection.	
P264	Wash all exposed external body areas thoroughly after handling.	

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Sanicare Plus Sani-Plus Hospital Grade Disinfectant (Eucalyptus Fragrance)

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.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	

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.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
8001-54-5	<1	benzalkonium chloride
7173-51-5	<1	didecyldimethylammonium chloride
Not Available	balance	Ingredients determined not to be hazardous
Legend:	 Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available 	

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	 If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. 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	 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

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider:

- foam.
- dry chemical powder.
- carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Advice for firefighters

Fire Fighting

Fire/Explosion Hazard	 The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke.
	nitrogen oxides (NOX)
	May emit poisonous fumes.
	May emit corrosive fumes.
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal	l precautions,	protecti	ve equ	ipment	and	emergency	/ proced	lures
See sect	tion 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. Wipe up. Place in a suitable, labelled container for waste disposal.
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. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

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

SECTION 7 Handling and storage

Precautions for safe handling	
Safe handling	 DO NOT allow clothing wet with material to stay in contact with skin 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 enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with scap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

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

Control parameters					
Occupational Exposure Limits (C	DEL)				
INGREDIENT DATA					
Not Available					
Emergency Limits					
Ingredient	TEEL-1 TEEL-2 TEEL-3				
benzalkonium chloride	0.91 mg/m3	10 mg/m3		60 mg/m3	
didecyldimethylammonium chloride	0.82 mg/m3	9 mg/m3		17 mg/m3	
Ingredient	Original IDLH		Revised IDLH		
benzalkonium chloride	Not Available		Not Available		
didecyldimethylammonium chloride	Not Available		Not Available		
Occupational Exposure Banding					
Ingredient	Occupational Exposure Band Rating		Occupational Exposu	re Band Limit	
benzalkonium chloride	E		≤ 0.01 mg/m³		
didecyldimethylammonium chloride	E		≤ 0.01 mg/m³		
Notes:	Occupational exposure banding is a process of assign adverse health outcomes associated with exposure. T range of exposure concentrations that are expected to	ing chemicals into he output of this pr protect worker hea	specific categories or band ocess is an occupational e. alth.	's based on a chemic kposure band (OEB),	al's potency and the which corresponds to a
Exposure controls	Engineering controls are used to remove a hazard or p	blace a barrier betw	reen the worker and the ha	zard. 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.				
	Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.				
	Type of Contaminant:			Air Speed:	
	solvent, vapours, degreasing etc., evaporating from tank (in still air).			0.25-0.5 m/s (50-100 f/min.)	
Appropriate engineering	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)			0.5-1 m/s (100-200 f/min.)	
controls	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)			1-2.5 m/s (200-500 f/min.)	
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).			2.5-10 m/s (500-2000 f/min.)	
	Within each range the appropriate value depends on:				
	Lower end of the range Upper end of the range				
	1: Room air currents minimal or favourable to captur	e 1: Disturb	ing room air currents		
	2: Contaminants of low toxicity or of nuisance value	only. 2: Contan	ontaminants of high toxicity		
	3: Intermittent, low production.	3: High production, heavy use			
	4: Large hood or large air mass in motion	4: Small h	ood-local control only		

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

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. 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. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in

	a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
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 NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, betts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also foot 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. Personal hyginen 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 moisturiser is recommended. Glove thickness and deternity Beleter gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.1.0.1 or national equivalent) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.1.0.1 or national equivalent). Mora 374, AS/NZS 2161.1.0.1 or national equivalent) is recommended. Some glove polymer types are less affected by movement and this should be taken into account when considering glo
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

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:

Sanicare Plus Sani-Plus Hospital Grade Disinfectant (Eucalyptus Fragrance)

Material	CPI
BUTYL	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE	С
PE/EVAL/PE	С
PVA	С
PVC	С
SARANEX-23	С
SARANEX-23 2-PLY	С

Respiratory protection

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	AB-AUS / Class1 P2	-
up to 50	1000	-	AB-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	AB-2 P2
up to 100	10000	-	AB-3 P2
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand 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.

TEFLON	С
VITON	С
VITON/CHLOROBUTYL	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

- 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

The wearer must be warned to leave the contaminated area immediately on

Appearance	Light green liquid with Eucalyptus odour; mixes with water.			
Physical state	Liquid	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 Applicable	
pH (as supplied)	Not Available	Decomposition temperature	Not Available	
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available	
Initial boiling point and boiling range (°C)	Not Available	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 Available	Gas group	Not Available	
Solubility in water	Miscible	pH as a solution (%)	Not Available	
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available	

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 respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Not normally a hazard due to non-volatile nature of product
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition 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	There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby. There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the

Sanicare Plus Sani-Plus	ΤΟΧΙΟΙΤΥ	IRRITATION
Hospital Grade Disinfectant (Eucalyptus Fragrance)	Not Available	Not Available
	ΤΟΧΙΟΙΤΥ	IRRITATION
benzalkonium chloride	Dermal (rabbit) LD50: 1560 mg/kg ^[2]	Eye (human): 0.05 mg SEVERE
	Oral (Rat) LD50; 240 mg/kg ^[2]	Eye (rabbit): 1mg/24h SEVERE
		Skin (human): 0.15 mg/72h mild
	ΤΟΧΙΟΙΤΥ	IRRITATION
didecyldimethylammonium chloride	dermal (rat) LD50: >1000 mg/kg ^[1]	Skin (rabbit): 500 mg SEVERE
	Oral (Rat) LD50; 84 mg/kg ^[2]	
Legend:	Value obtained from Europe ECHA Registered Subst specified data extracted from RTECS - Register of Toxic	ances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherw : Effect of chemical Substances

BENZALKONIUM CHLORIDE	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 distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested. Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure. Alkyldimethylbenzylammonium chlorides are in the list of dangerous substances of council directive, classified as "harmful in contact with skin and on ingestion", and "corrosive and very toxic to aquatic organisms". It can cause dose dependent skin and eye irritation with possible deterioration of vision, possible sensitisation in those with pre-existing eczema. It does not cause cancer, genetic defect, foetal or developmental abnormality. For a
DIDECYLDIMETHYLAMMONIUM CHLORIDE	Somolence recorded. There is no data that exists regarding the health effects of cationic dialkyldimethylammonium (DADMA) saits, but they are expected to have similar properties to alkyltrimethylammonium (ATMA) saits, although they are generally less irritating than the corresponding ATMA saits 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 unborn. For alkyltrimethylammonium chloride (ATMAC) Most undiluted cationic surfactants assitsly the criteria for classification as Carrosive with R34 and R41. In addition, certain surfactants will satisfy the criteria for classification as Corrosive with R34 and R41. In addition, certain surfactants will satisfy the criteria for classification as Corrosive (CSIO). C3-18 alkyltrimethylammonium chloride (ATMAC) (i.e., lauryl, coco, soya, and tallow) are classified as Corrosive (C) with the risk phrases R32 (Harmful if swallowed), and R41 (Risk of serious damage to eyes). C20-22 ATMAC are classified as Irritant (XI) with R36/38 (Irritating to eyes and skin). Acute toxicity: ATMAB (the bromide) is poorty absorbed through the skin or the digestive tract. Acute oral toxicity of alkyltrimethylammonium salts is somewhat higher than the toxicity of anionic and nonionic surfactants. This may be due to the strongly inritating effect which cationic surfactants have on the mucous membrane of the gastroinetistinal tract. Cationic surfactants compared to bhose of anionic surfactants. In contrast to the leng given by mouth. Skin and eye inritation: Skin irritation operated to being diven by mouth. Sub-chronic toxicity: Animal testing over the long term resulted in to affects, except for reduced body weight at very high doses. Reproductive toxicity: Animal testing over the long term resulted in on affects, except for reduced body wei

BENZALKONIUM CHLORIDE & DIDECYLDIMETHYLAMMONIUM CHLORIDE 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. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

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 no	t available or does not fill the criteria for classification

SECTION 12 Ecological information

Toxicity

Sanicare Plus Sani-Plus	Endpoint	Test Duration (hr)	:	Species		Value	Source
Hospital Grade Disinfectant (Eucalyptus Fragrance)	Not Available	Not Available		Not Available		Not Available	Not Available
	Endpoint	Test Duration (hr)		Species		Value	Source
benzalkonium chloride	NOEC(ECx)	48h		Crustacea		0.3mg/l	4
	EC50	96h		Algae or other aquatic plants		<0.96mg/L	4
	Endpoint	Test Duration (hr)	Sp	ecies	Val	ue	Source
	EC50(ECx)	96h	Alg	ae or other aquatic plants	0.00)8-0.024mg/L	4
didecyldimethylammonium chloride	LC50	96h	Fis	h	0.16	6-0.27mg/L	4
	ECE0	48h	Cru	istacea	0.014-0.022mg/L		4
chionae	EC30						

Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful to aquatic organisms

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients
Bioaccumulative potential		
Ingredient	Bioaccumulation	
	No Data available for all ingredients	
Mobility in soil		
Ingredient	Mobility	
	No Data available for all ingredients	

SECTION 13 Disposal considerations

Waste treatment methods	
Product / Packaging disposal	 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 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.

Data available to make classification

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): 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

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
benzalkonium chloride	Not Available
didecyldimethylammonium chloride	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
benzalkonium chloride	Not Available
didecyldimethylammonium chloride	Not Available

SECTION 15 Regulatory information

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

benzalkonium chloride is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

didecyldimethylammonium chloride is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 6 Australian Inventory of Industrial Chemicals (AIIC)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 6 Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

Australia - AIIC / Australia Non-Industrial Use Yes Canada - DSL Yes Canada - NDSL No (benzalkonium chloride; didecyldimethylammonium chloride) China - IECSC Yes Europe - EINEC / ELINCS / NLP No (benzalkonium chloride) Japan - ENCS No (benzalkonium chloride) Korea - KECI Yes New Zealand - NZIOC Yes Philippines - PICCS Yes USA - TSCA No (benzalkonium chloride) Yes Yes USA - TSCA No (benzalkonium chloride) Yes Yes Philippines - PICCS Yes Ves Yes USA - TSCA No (benzalkonium chloride) Yes Yes Vietnam - NCI Yes Yes Yes Russia - FBEPH Yes Yes = All CAS declared ingredients are on the inventory' No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	National Inventory	Status
Canada - DSLYesCanada - NDSLNo (benzalkonium chloride; didecyldimethylammonium chloride)China - IECSCYesEurope - EINEC / ELINCS / NLPNo (benzalkonium chloride)Japan - ENCSNo (benzalkonium chloride)Korea - KECIYesNew Zealand - NZIoCYesPhilippines - PICCSYesUSA - TSCANo (benzalkonium chloride)Taiwan - TCSIYesMexico - INSQYesVietnam - NCIYesRussia - FBEPHYesLegend:Yes - All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - NDSL No (benzalkonium chloride; didecyldimethylammonium chloride) China - IECSC Yes Europe - EINEC / ELINCS / NLP No (benzalkonium chloride) Japan - ENCS No (benzalkonium chloride) Korea - KECI Yes New Zealand - NZIOC Yes Philippines - PICCS Yes USA - TSCA No (benzalkonium chloride) Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Canada - DSL	Yes
China - IECSC Yes Europe - EINEC / ELINCS / NLP No (benzalkonium chloride) Japan - ENCS No (benzalkonium chloride) Korea - KECI Yes New Zealand - NZIoC Yes Philippines - PICCS Yes USA - TSCA No (benzalkonium chloride) Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Canada - NDSL	No (benzalkonium chloride; didecyldimethylammonium chloride)
Europe - EINEC / ELINCS / NLPNo (benzalkonium chloride)Japan - ENCSNo (benzalkonium chloride)Korea - KECIYesNew Zealand - NZloCYesPhilippines - PICCSYesUSA - TSCANo (benzalkonium chloride)Taiwan - TCSIYesMexico - INSQYesVietnam - NCIYesRussia - FBEPHYesLegend:Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	China - IECSC	Yes
Japan - ENCSNo (benzalkonium chloride)Korea - KEClYesNew Zealand - NZIoCYesPhilippines - PICCSYesUSA - TSCANo (benzalkonium chloride)Taiwan - TCSIYesMexico - INSQYesVietnam - NClYesRussia - FBEPHYesLegend:Yes = All CAS declared ingredients are not on the inventory. These ingredients may be exempt or will require registration.	Europe - EINEC / ELINCS / NLP	No (benzalkonium chloride)
Korea - KECI Yes New Zealand - NZIoC Yes Philippines - PICCS Yes USA - TSCA No (benzalkonium chloride) Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Japan - ENCS	No (benzalkonium chloride)
New Zealand - NZIoC Yes Philippines - PICCS Yes USA - TSCA No (benzalkonium chloride) Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Korea - KECI	Yes
Philippines - PICCS Yes USA - TSCA No (benzalkonium chloride) Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	New Zealand - NZIoC	Yes
USA - TSCA No (benzalkonium chloride) Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Philippines - PICCS	Yes
Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	USA - TSCA	No (benzalkonium chloride)
Mexico - INSQ Yes Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Taiwan - TCSI	Yes
Vietnam - NCI Yes Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Mexico - INSQ	Yes
Russia - FBEPH 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. These ingredients may be exempt or will require registration.	Vietnam - NCI	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. These ingredients may be exempt or will require registration.	Russia - FBEPH	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. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	19/07/2021
Initial Date	29/06/2021

SDS Version Summary

Version	Date of Update	Sections Updated
3.1	30/06/2021	Chronic Health, Classification, Engineering Control, Ingredients, Use
4.1	19/07/2021	Environmental, Name

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 ES: Exposure Standard 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 AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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