Safety Data Sheet

Hazardous Chemical, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Chillsan**

Recommended use: Disinfectant for professional use.

Supplier:	Hygiene Technologies Ltd
Company No.:	2103588
Street Address:	28 Rangitane Rd Whakatu, Hastings 4172 New Zealand
Telephone:	+ 64 6 876 4111 or 0800 732 525
Facsimile:	+ 64 6 878 3802
Email:	info@hygienetech.co.nz

Emergency Telephone number: **NZ Fire Service 111**
National Poisons Centre – 0800 764 766

2. HAZARDS IDENTIFICATION

Dangerous Goods
Not classified as a Dangerous Good according to NZS5433:2020 "Transport of Dangerous Goods on Land".

Hazardous Substances
Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

Signal Word
DANGER

Pictograms
Corrosion, Flame

Hazard Classifications
Eye Damage – Category 1
Skin Irritation – Category 2
Flammable Liquid – Category 3
Aquatic toxicity (chronic) – Category 3

Hazard Statements
Causes serious eye damage.
Causes skin irritation.
Flammable liquid and vapour.
May cause long lasting harmful effects to aquatic life.

Precautionary Statements
Prevention
Wear protective gloves and eye protection. Wash thoroughly after handling. Read label before use. Keep away from hot surfaces – No smoking. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor.
IF ON SKIN: Wash with plenty of water. Specific treatment (see Section 4 of this SDS). If skin irritation occurs: Get medical attention. Take off contaminated clothing and was it before reuse.
If case of fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).
Avoid release to the environment.

Storage and Disposal
Store in a well-ventilated place. Keep cool. Dispose of contents and container in accordance with local regulations.

EPA Group Standard:
HSR002528 - Cleaning Products (Flammable) Group Standard

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Alcohols, C13-15, branched and linear, ethoxylated	157627-86-6	30 - 60 %
Ethanol	64-17-5	10 - 30 %
1,3-propanediamine, N-(3-aminopropyl)-N-dodecyl-	2372-82-9	<10 %
t-Butyl Alcohol	75-65-0	<1 %
Ingredients determined to be non-hazardous at the concentrations used	-	Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a Doctor; or for 15 minutes and transport to Doctor or Hospital. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

PPE for First Aiders: Wear safety shoes, overalls, gloves, chemical goggles. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Hazchem Code: None allocated

Suitable extinguishing media: If material is involved in a fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Flammable liquid and vapour (does not support combustion). May form flammable vapour mixtures with air. Flameproof equipment may be necessary in area where this chemical is being used. Avoid ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) should be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice: Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS
If safe to do so, shut off possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Use a spark-free shovel. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: None allocated

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition.
Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Ethanol (Ethyl alcohol)	1,000	1,880			
t-Butyl Alcohol	100	303	150	445	

As published by WorkSafe New Zealand.

WES-TWA (Workplace Exposure Standard - Time-weighted average). The average airborne concentration of a substance calculated over an eight-hour working day.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded at any time during any part of the working day.

WES-STEL (Workplace Exposure Standard - Short-term exposure limit). The 15-minute time weighted average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time- weighted average exposures apply. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.

(skin) - Skin absorption. Skin absorption–applicable to a substance that is capable of being significantly absorbed into the body through contact with the skin.

(bio) - Exposure can also be estimated by biological monitoring.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the WorkSafe New Zealand no ingredient in this material requires Health Surveillance:

For detailed information see WorkSafe New Zealand.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, CHEMICAL GOGGLES.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear safety shoes, overalls, gloves, chemical goggles. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Colourless
Odour:	Negligible
Solubility:	Miscible with water
Specific Gravity (20 °C):	1.0 (typical)
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	6 kPa @ 20°C (ethanol)
Flash Point (°C):	Approx. 39
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	N Av
pH:	10.8 - 11.8
Viscosity:	N Av

(Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Strong oxidising agents and acids.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

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

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in irritation.

Ingestion: Swallowing may result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 20.0 mg/L for vapours or LC50 > 5.0 mg/L for dust and mist or LC50 > 5,000 ppm gas

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw

Ingestion: This material has been classified as non-hazardous.

Corrosion/Irritancy: Eye: this material has been classified as a substance that is corrosive to ocular tissue. Skin: this material has been classified as a substance that is irritating to the skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as toxic.

Long-term aquatic hazard: May cause long lasting harmful effects in an aquatic environment.

Ecotoxicity in the soil environment: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial vertebrates: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial invertebrates: This material has been classified as non-hazardous.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as a Dangerous Good according to NZS 5433:2020 Transport of Dangerous Goods on Land.

UN No	Nil
Class-primary	Nil
Packing Group	Nil
Proper Shipping Name	Nil
Hazchem Code	Nil

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code(IMDG Code) for transport by sea.

UN No	Nil
Class-primary	Nil
Packing Group	Nil
Proper Shipping Name	Nil

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA)Dangerous goods Regulations for transport by air.

UN No	Nil
Class-primary	Nil
Packing Group	Nil
Proper Shipping Name	Nil

15. REGULATORY INFORMATION

All components of this product are listed on or exempt from the New Zealand Inventory ofChemical (NZIoC).

EPA Group Standard: HSR002528 - Cleaning Products (Flammable) Group Standard

16. OTHER INFORMATION

Reason for issue: Formulation change

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.