1. Identification of Substance & Company

Product

Product name	Dry Wash
Product code	NA
HSNO approval	HSR001180
Approval description	2-Propanol
UN number	1219
Proper Shipping Name	ISOPROPANOL
DG class	3
Packaging group	II
Hazchem code	2YE
Uses	Solvent

Company Details

Company	**SANTER SUPPLIES**
Address	18 Faulke Avenue Wainuiomata Lower Hutt 5014 New Zealand
Website	www.santersupplies.com

Emergency Telephone Number: 0800 764 766

2. Hazard Identification

Approval

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR001180, 2-Propanol). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020.

GHS 7 Classes	Hazard Statements
Flammable liquid category 2	H225 - Highly flammable liquid and vapour.
Eye irritant category 2	H319 - Causes serious eye irritation.
Aspiration category 1	H304 - May be fatal if swallowed and enters airways.
STOT* single exposure category 3	H336 - May cause drowsiness or dizziness.

*STOT – System Target Organ Toxicity

SYMBOLS

DANGER

Other Classifications

There are no other classifications that are known to apply.

Precautionary Statements

Prevention	P102 - Keep out of reach of children. P103 - Read label before use. P210 - Keep away from ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P261 - Avoid breathing vapours. P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/protective clothing/eye protection.
Response	P101 - If medical advice is needed, have product container or label at hand. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. P331 - Do NOT induce vomiting. P304+P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P312 - Call a POISON CENTRE or doctor/physician if you feel unwell.
Storage	P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up.
Disposal	P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
isopropanol	67-63-0	100%

This is a commercial product whose exact ratio of components may vary slightly. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is recommended. Accessible eyewash is recommended.

Exposure

Swallowed	IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.
Skin contact	IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.
Inhaled	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	Vapours may form an explosive mixture in air which can be ignited by many sources such as pilot lights, open flames, electrical motors, switches and static electricity. Vapour is heavier than air and may flow along surfaces to distant ignition source and flashback.
Suitable extinguishing substances:	Alcohol foam, carbon dioxide or dry chemical.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	2YE

6. Accidental Release Measures

Containment	If greater than 1000L is stored, secondary containment is required. Emergency plans to manage any potential spills must be in place. Prevent spillage from spreading or entering soil, waterways or drains.
Emergency procedures	In the event of spillage alert the fire brigade to location and give brief description of hazard. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
Clean-up method	Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapour. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10. Location compliance certificates must be available if storing greater than 250 L in closed containers of ≤ 5 L capacity), or greater than 50L (in use) of flammables with flammable liquid cat 2 classification. Containers (and outer packaging) must bear the prescribed labelling, including the Hazchem code, UN number, flammability warning and name of contents.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m^3 for respirable particulates and 10mg/m^3 for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	isopropanol	400ppm, 983mg/m^3	500ppm, 1230mg/m^3

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

General

Personal Protective Equipment (PPE) should not be used as the primary means of exposure protection, except in the event of an accident or emergency situation or where all other means of protection have proven to inadequate. Clean PPE after use or dispose of as appropriate. Store PPE for re-use in a clean place. Regular training on the correct use of PPE should be provided. In particular the correct fitting and use of respirators and where applicable the cleaning of respirators should be undertaken.

Eyes

Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible. Select eye protection in accordance with AS/NZS 1337.

Skin

If discomfort is felt (e.g., if pre-existing conditions exist, such as dermatitis, cuts or sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves. Nitrile, PVC or Neoprene gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use.

Respiratory

A respirator when airborne concentrations approach the WES (section 8). Respirators must have filters appropriate to the duty and comply with AS/NZS1716 and selected, used and maintained in accordance with AS/NS 1715. Use an organic vapour cartridge with a dust/mist filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order. Fit testing and clear guidelines and training for use and maintenance of PPE are necessary.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	clear colourless liquid
Odour	slight alcoholic odour
Odour Threshold	no data
pH	no data
Freezing/melting point	-90°C
Boiling Point	82°C
Flashpoint	12°C (closed cup)
Flammability	flammable liquid
Upper & lower flammable limits	LEL: 2.0% Vol, UEL: 12% Vol
Vapour pressure	60.2hPa (25°C), 43hPa (20°C)
Vapour density	2 @ 20°C (Air = 1)
Specific gravity/density	0.7855g/cm^3 (20°C)
Solubility	miscible in water
Partition coefficient	no data
Auto-ignition temperature	399-425°C
Decomposition temperature	no data
Viscosity	dynamic: 2.5mPas (20°C)
Particle Characteristics	no data

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Flammable substance. Keep away from sources of ignition at all times. Containers should be kept closed in order to avoid contamination.
Incompatible groups	Avoid contact with strong oxidizing agents.
Substance Specific Incompatibility	none known
Hazardous decomposition products	Thermal decomposition products include carbon dioxide and carbon monoxide.
Hazardous reactions	none known

11. Toxicological Information

Summary

IF SWALLOWED: may cause headache, nausea, dizziness, fatigue, muscular weakness, drowsiness. Isopropanol poses a risk of aspiration into the lungs following oral exposure (bronchopneumonia) and aspiration of small amount may be fatal.
IF ON SKIN: may cause drying out of the skin and mild irritation.
IF IN EYES: Causes serious eye irritation.
IF INHALED: May cause drowsiness or dizziness.

Supporting Data

Acute	**Oral**	Isopropanol: LD_{50} (oral) 3600mg/kg (mouse).
	Aspiration	This substance is considered an aspiration hazard.
	Dermal	No evidence of dermal toxicity.
	Inhaled	Exposure to high concentrations may result in dizziness and drowsiness. .
	Eye	Isopropanol is considered to be an eye irritant.
	Skin	Isopropanol is not classed to be a skin irritant.
Chronic	**Sensitisation**	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	Vapour may cause dizziness and drowsiness.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This mixture is not considered harmful in the environment. In all cases prevent run-off to drains, sewers and waterways.

Supporting Data

Aquatic	Using EC_{50}'s for ingredients, the estimated EC_{50} for the mixture is >100 mg/L.
Bioaccumulation	No data
Degradability	No data
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	See acute toxicity.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the

requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

14. Transport Information - flammable

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007
Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangerous good for transport.

UN number:	1219	**Proper shipping name:**	ISOPROPANOL
Class(es)	3	**Packing group:**	II
Precautions:	Flammable liquid	**Hazchem code:**	2YE

IMDG

UN number:	1993	**Proper shipping name:**	ISOPROPANOL
Class(es)	1219	**Packing group:**	II
Precautions:	3	**EmS**	F-E, S-D

IATA

UN number:	1219	**Proper shipping name:**	ISOPROPANOL
Class(es)	3	**Packing group:**	II
Precautions:	Flammable liquid		

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR001180, 2-Propanol. All ingredients appear on the New Zealand Inventory of Chemicals NZIoC.

Specific Controls

Key workplace requirements are:	
SDS	To be available within 10 minutes in workplaces storing any *quantity.*
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately *packaged including substances that* have been decanted, transferred or manufactured for own use or have been supplied
Labelling	Must comply with *the Hazardous Substances (Labelling)* Notice 2017.
Emergency plan	Required if > 1000L is stored.
Certified handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Required if > *1000L is stored.*
Signage	Required if > 250L is *stored.*
Location compliance certificate	Required if > 100L (containers >5L), 250L (containers ≤5L), 50L (in use) is stored.
Flammable zone	Must be established if > 100L (closed containers), 25L (decanting), 5L (open occasionally), 1L (in use), stored in any one location is stored.
Fire extinguisher	If > 250L present.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR001180, 2-Propanol Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
GHS	Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition, 2017, published by the United Nations.
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
STOT RE	System Target Organ Toxicity – Repeated Exposure
STOT SE	System Target Organ Toxicity – Single Exposure
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
Controls	EPA notices, www.epa.govt.nz, Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz
WES	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.
Other References:	Suppliers SDS

Review

Date	Reason for review
November 2024	Not applicable - New SDS

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