This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020).

SAFETY DATA SHEET



1. Identification

Product name SDS no. Formulation # Supplier	 Glen 20 Light & Fresh Spray Disinfectant Berry Breeze (AU) D8382333 FF3167242 AUSTRALIA RB (Hygiene Home) Australia Pty Ltd 680 George St , Sydney, NSW 2000
	Tel: +61 (0)2 9857 2000 NEW ZEALAND RB (Hygiene Home) New Zealand Limited 2 Fred Thomas Drive, Takapuna Auckland , New Zealand 0622 Tel: +64 9 484 1400
Poison Information contact:	: Australia - 13 11 26 New Zealand - 0800 764 766 or 0800 POISON
<u>Uses</u>	
Product use	: Disinfecting Spray

2. Hazard identification

Classification of the substance or mixture	: AEROSOLS - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
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GHS label elements

Hazard pictograms



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Signal word	- 1	DANGER
Hazard statements	-	Extremely flammable aerosol. Pressurised container: may burst if heated. Causes serious eye irritation.
Precautionary statements		
General	;	Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources No smoking. Pressurized container: Do not pierce or burn, even after use.
Response	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	:	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Disposal	:	Not applicable.

3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	% (w/w)) CAS number	
ethanol	≥30 - ≤60	64-17-5	
n-butane	≥10 - ≤30	106-97-8	
Isobutane	≥10 - ≤30	75-28-5	
propane	≤5	74-98-6	
ethane	≤3	74-84-0	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

4. First-aid measures

Description of necessary first aid measures			
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.		
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.		
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. 		
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.		

Most important symptoms/effects, acute and delayed

Potential acute healt	
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs	/symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	 Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
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4. First-aid measures

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: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

5. Fire-fighting measures		
Extinguishing media		
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	: None known.	
Specific hazards arising from the chemical	: Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.	
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.	
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. 	
Hazchem code	: Not applicable	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

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6. Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

7. Handling and storage

Precautions for safe handling	
Protective measures :	Put on appropriate personal protective equipment (see Section 8). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
Advice on general : occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, : including any incompatibilities	Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control parameters

Australia

Occupational exposure limits

Ingredient name		Exposure limits
ethanol		Safe Work Australia (Australia, 12/2019).
		TWA: 1880 mg/m ³ 8 hours.
		TWA: 1000 ppm 8 hours.
n-butane		Safe Work Australia (Australia, 12/2019).
		TWA: 1900 mg/m ³ 8 hours.
		TWA: 800 ppm 8 hours.
Isobutane		ACGIH TLV (United States, 1/2022). [Butane] Explosive
		potential.
		STEL: 1000 ppm 15 minutes.
propane		ACGIH TLV (United States, 1/2022). Oxygen Depletion
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8. Exposure controls/personal protection

ethane	[Asphyxiant]. Explosive potential. ACGIH TLV (United States, 1/2022). Oxygen Depletion [Asphyxiant]. Explosive potential.
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New Zealand

Occupational exposure limits

Ingredient name	Exposure limits
ethanol	NZ HSWA 2015 - GRWM 2016 (New Zealand, 11/2020). WES-TWA: 1000 ppm 8 hours. WES-TWA: 1880 mg/m ³ 8 hours.
butane	NZ HSWA 2015 - GRWM 2016 (New Zealand, 11/2020). WES-TWA: 800 ppm 8 hours. WES-TWA: 1900 mg/m³ 8 hours.
Isobutane	ACGIH TLV (United States, 1/2022). [Butane] Explosive potential. STEL: 1000 ppm 15 minutes.
propane	NZ HSWA 2015 - GRWM 2016 (New Zealand, 11/2020). Oxygen Depletion [Asphyxiant].
ethane	NZ HSWA 2015 - GRWM 2016 (New Zealand, 11/2020). Oxygen Depletion [Asphyxiant].
controls vapour or mist, us engineering contr recommended or	equate ventilation. If user operations generate dust, fumes, gas, se process enclosures, local exhaust ventilation or other ols to keep worker exposure to airborne contaminants below any statutory limits. The engineering controls also need to keep gas, ncentrations below any lower explosive limits. Use explosion-proof nent.

Environmental exposure	: Emissions from ventilation or work process equipment should be checked to ensure
controls	they comply with the requirements of environmental protection legislation. In some
	cases, fume scrubbers, filters or engineering modifications to the process
	equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

8. Exposure controls/personal protection

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Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>		
Physical state	:	Liquid. [Aerosol]
Colour	:	Not available.
Odour	:	Berry Breeze
Odour threshold	:	Not available.
рН	:	Not available.
Melting point/freezing point	:	Not available.
Boiling point, initial boiling point, and boiling range	:	Not available.
Flash point	:	Not applicable.
Evaporation rate	:	Not available.
Flammability	:	Not available.
Lower and upper explosion limit/flammability limit	:	Not available.
Vapour pressure	:	Not available.
Relative vapour density	:	Not available.
Relative density	:	Not available.
Solubility(ies)	:	
Not available.		
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Heat of combustion	:	28.69 kJ/g
Viscosity	:	Not available.
Particle characteristics		
Median particle size	1	Not applicable.
Aerosol product		
Type of aerosol	;	Spray

10. Stability and reactivity	
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.

Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
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Incompatible materials : No specific data.

Hazardous decomposition	: Under normal conditions of storage and use, hazardous decomposition products
products	should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
n-butane	LC50 Inhalation Vapour	Rat	658000 mg/m ³	4 hours
Isobutane	LC50 Inhalation Vapour	Rat	658000 mg/m³	4 hours

Conclusion/Summary Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Eyes - Moderate irritant	Rabbit	-	mg 0.066666667 minutes 100	-
	Eyes - Moderate irritant	Rabbit	_	mg 100 uL	_
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	

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Conclusion/Summary	Based on available data, the classification criteria are not met.	
Not available.		
Carcinogenicity		
Conclusion/Summary	Based on available data, the classification criteria are not met.	
Not available.		
Germ Cell Mutagenicity		
Respiratory	Based on available data, the classification criteria are not met.	
Skin	Based on available data, the classification criteria are not met.	
Conclusion/Summary		
Not available.		
Sensitisation		
Respiratory	Based on available data, the classification criteria are not met.	
Eyes	Calculation method Causes serious eye irritation.	
-	Deced on evaluable data the classification evitaria are not most	
<u>Conclusion/Summary</u> Skin	Based on available data, the classification criteria are not met.	

11. Toxicological information

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Conclusion/Summary Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available. of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
Not available.	
Conclusion/Summary	Based on available data, the classification criteria are not met.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Germ Cell Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
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11. Toxicological information

Developmental effects Developmental effects : No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	
ethanol	Acute EC50 3306 mg/l Marine water	Algae - Ulva pertusa	96 hours	
	Acute EC50 1074 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours	
	Acute LC50 5680 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
	Acute LC50 11000000 μg/l Marine water	Fish - Alburnus alburnus	96 hours	
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours	
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days	

Conclusion/Summary Based on available data, the classification criteria are not met.

Persistence and degradability

Conclusion/Summary Based on available data, the classification criteria are not met.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanol	-0.35	-	low
n-butane	2.89	-	low
Isobutane	2.8	-	low
propane	1.09	-	low
ethane	1.09	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

D8382333 14. Transport information ADG **ADR/RID** IMDG ΙΑΤΑ UN1950 **UN number** UN1950 UN1950 UN1950 **UN proper** AEROSOLS **AEROSOLS AEROSOLS** Aerosols, flammable shipping name **Transport hazard** 2.1 2 2.1 2.1 class(es) **Packing group** No. **Environmental** No. No. No. hazards **Additional information** ADG : Special provisions 63, 190, 277, 327, 344, 381

ADR/RID	:	Limited quantity 1 L Special provisions 190, 327, 625, 344 Tunnel code (D)
IMDG	:	Emergency schedules F-D, S-U Special provisions 63, 190, 277, 327, 344, 381, 959
ΙΑΤΑ	:	Quantity limitation Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 203. Cargo Aircraft Only: 150 kg. Packaging instructions: 203. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y203. Special provisions A145, A167, A802
Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not scheduled	
Australian Inventory of Industrial Chemicals (AIIC)	All components are listed or exempted.
ARTG Number:	AUST L 65954
New Zealand Inventory of Chemicals (NZIoC)	All components are listed or exempted.
HSNO Group Standard	Aerosols (Flammable)
HSNO Approval Number	HSR002515
Approved Handler Requirement	Not applicable.
Tracking Requirement	Not applicable.

16. Other information

Key to abbreviations	 ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods GHS = Globally Harmonized System of Classification and Labelling of Chemicals IBC = Intermediate Bulk Container SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations SWA = Safe Work Australia HSNO = Hazardous Substances and New Organisms Act 1996
Date of issue / Date of revision	: 26/05/2023
Version	: 3 (Version for undated GHS Revision 7 PSDS Template)

(Version for updated GHS Revision 7 PSDS Template)

	Procedure	used to	derive the	classification
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Classification	Justification
AEROSOLS - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	On basis of test data Calculation method

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Please read all labels carefully before using product.