SAFETY DATA SHEET

DeLaval Hand Sanitizer

Preparation Date: 20-May-2020
Revision Number: *1.1*
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Date of Next Revision: *12-Sep-2029*

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name	DeLaval Hand Sanitizer
Item#:	NZ0029
Recommended use	Disinfectant
Uses advised against	Restricted to professional users
Supplier	DeLaval Ltd, 82 Greenwood street, Hamilton New Zealand
Telephone Number	(07) 849-6020 (8am - 4:30pm Mon-Fri)
Emergency Telephone Number	0800 764 766 (National Poison Centre) 0800 243 622 CHEMCALL

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture according to GHS

Skin corrosion/irritation - Category 2
Serious eye damage/eye irritation - Category 2
Specific target organ toxicity (repeated exposure) - Category 2
Aspiration hazard - Category 1
Flammable liquids - Category 2

2.2. Label Elements

Hazard Pictogram(s)

Signal word DANGER

Hazard Statements

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure
H304 - May be fatal if swallowed and enters airways
H225 - Highly flammable liquid and vapor

Precautionary statements

P102 - Keep out of reach of children
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground and bond container and receiving equipment
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash hands and face thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P316 - IF SWALLOWED: Get emergency medical help immediately
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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
P319 - Get medical help if you feel unwell
P331 - Do NOT induce vomiting
P332 + P317 - If skin irritation occurs: Get medical help
P337 + P317 - If eye irritation persists: Get medical help
P362 + P364 - Take off contaminated clothing and wash it before reuse
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish
P403 + P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container in accordance with local regulations

Contains Isopropanol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Isopropyl alcohol	67-63-0	> 60%
Hydrogen peroxide	7722-84-1	1 - 10%

4. FIRST AID MEASURES

Workplace Facilities Eyewash bottle with clean water

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
Immediate medical attention is required
Keep eye wide open while rinsing

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air
If not breathing, give artificial respiration
If breathing is difficult, give oxygen
Call a physician or Poison Control Center immediately

Ingestion Immediate medical attention is required. Remove from exposure, lie down. Clean

	mouth with water and afterwards drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

5. FIRE-FIGHTING MEASURES

Hazchem Code	No Hazchem Code allocated
Flammable Properties	No information available.
Suitable Extinguishing Media	Water fog. Carbon dioxide (CO2). Extinguishing powder. alcohol-resistant foam.
Unsuitable Extinguishing Media	No information available.
Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes. Carbon monoxide. Carbon dioxide (CO2).
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Avoid dispersal of spilt material into waterways, drains, and sewers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Material can create slippery conditions.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Handling	Store in a tightly closed container. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from heat, sparks and open flame. - No smoking. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Use non-sparking tools. Do not eat, drink or smoke when using this product.
Storage	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Ground/bond container and

receiving equipment. Keep in properly labelled containers. Do not store near acids. Incompatible with strong bases and oxidizing agents.

Type of Container/Package Store in original container

Handle and store according to AS/NZS Standards and the Responsible Care Management Systems: Managers Handbook.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical name	WES (New Zealand)
Isopropyl alcohol	TWA: 400 ppm TWA: 983 mg/m^3 STEL: 500 ppm STEL: 1230 mg/m^3
Hydrogen peroxide	TWA: 1 ppm TWA: 1.4 mg/m^3

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Long sleeved clothing, Chemical resistant apron, Boots

Hand Protection Protective gloves

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In case of insufficient ventilation wear suitable respiratory equipment.

General Hygiene Considerations
Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	transparent
Physical state	Liquid
Odor	Alcohol
pH	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Flash Point	No data available
Autoignition Temperature	No data available
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Boiling Point/Range	No data available
Freezing Point/Range	No data available
Water Solubility	soluble
Solubility	No information available
Solubility in other solvents	No data available
Specific Gravity	No data available

Kinematic viscosity

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.

Conditions to Avoid Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Burning produces obnoxious and toxic fumes. Heating can release hazardous gases. To avoid thermal decomposition, do not overheat.

Incompatible Materials Incompatible with strong acids and bases, Incompatible with oxidizing agents

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapours. Carbon monoxide. Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Inhalation No information available.
Eye contact No information available.
Skin contact No information available.
Ingestion No information available.

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl alcohol	5840 mg/kg (Rat)	13090 mg/kg (Rabbit)	25 mg/L (Rat) 4 h
Hydrogen peroxide	500 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.17 mg/l vapour (49.3% H2O2)

Irritation Causes serious eye irritation Causes skin irritation
Corrosivity No information available.
Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity There are no known carcinogenic chemicals in this product.

Chemical name	Isopropyl alcohol
IARC	Group 3
Chemical name	Hydrogen peroxide
IARC	Group 3

Reproductive Effects No information available.
Developmental Effects No information available.
STOT - single exposure No information available
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects No information available

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Isopropyl alcohol	1000: 72 h Desmodesmus subspicatus mg/L EC50 1000: 96 h Desmodesmus subspicatus mg/L EC50	11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50	EC50 = 35390 mg/L 5 min	EC50 >100 mg/l: 48 h Daphnia magna
Hydrogen peroxide		10.0 - 32.0: 96 h Oncorhynchus mykiss mg/L LC50 static 18 - 56: 96 h Lepomis macrochirus mg/L LC50 static 16.4: 96 h Pimephales promelas mg/L LC50		18 - 32: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability No information available

Bioaccumulation/Accumulation No information available.

Mobility No information available

Biodegradation Some ingredients of this material have some potential to biodegrade, but most ingredients have a limited potential to biodegrade or have not been tested.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Should not be released into the environment. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

UN-No 1219
Proper Shipping Name Flammable liquid, n.o.s (Isopropanol)
Transport hazard class(es) 3
Packing Group II
Special Provisions Excepted quantities : E2
Tunnelcode : D/E
Kemler No. : 33
Environmental hazard None
Hazchem Code No Hazchem Code allocated

15. REGULATORY INFORMATION

ERMA Reference ERMA User Guide to the HSNO Controls, which links to the Hazardous Substances Regulations 2001

16. OTHER INFORMATION

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References
- Hazardous Substances (Hazardous Classification) Notice 2020
- Hazardous substances (Labelling) Notice 2017
- Hazardous Substances (Safety Data Sheets) Notice 2017
- GHS8
- European Agreement concerning the International Carriage of Dangerous Goods by Road
- New Zealand Workplace Exposure Standards (WES)
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans
- Chemical Classification and Information Database (CCID)

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End of SDS