

DeLaval Hand Sanitizer E

SAFETY DATA SHEET

Preparation Date: 12-May-2020

Revision Date: 19-May-2020

Revision Number: 1

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

Product Identifier

Product Name DeLaval Hand Sanitizer E

Other means of identification

Item#: 2182

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Hand Sanitizer

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier DeLaval Cleaning Solutions
11100 N. Congress Ave.
Kansas City, MO 64153
Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
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Flammable liquids	Category 2
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Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes serious eye irritation
Highly flammable liquid and vapor



Appearance Clear, Colorless	Physical state Liquid	Odor Alcohol
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Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Use explosion-proof electrical/ventilating/lighting/equipment

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 In case of fire: Use CO₂, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Water	7732-18-5	18.425
Ethyl alcohol	64-17-5	80
Glycerol	56-81-5	1.45
Hydrogen peroxide	7722-84-1	0.125

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	None under normal use conditions. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Move to fresh air.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a physician.
Protection of First-aiders	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most important symptoms and effects, both acute and delayed

May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO₂). Water spray. alcohol-resistant foam.

Unsuitable Extinguishing Media

None known based on information supplied.

Specific hazards arising from the chemical

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

None.

Sensitivity to static discharge Yes.

Protective Equipment and Precautions for Firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

NFPA

Health hazards 2

Flammability 3

Instability 0

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Evacuate personnel to safe areas. Use personal protective equipment. For personal protection see section 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other Information

Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE**Precautions for Safe Handling****Handling**

Use personal protective equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static

electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store in a well-ventilated place. Keep cool.

Incompatible Materials None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	3300 ppm
Glycerol 56-81-5		TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³	-
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³	75 ppm

Appropriate engineering controls

Engineering Controls Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection Tightly fitting safety goggles.

Skin and body protection Wear suitable gloves. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Alcohol
Appearance	Clear, Colorless	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	No information available
Boiling Point/Range	78.3 °C / 172.9 °F
Flash Point	17.5 °C / 63.5 °F
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit	No information available

Remarks/ Method

Lower flammability limit No information available
Vapor Pressure No information available
Vapor Density No information available
Specific Gravity No information available
Water Solubility No information available

Partition coefficient: n-octanol/water No information available
Autoignition Temperature No information available
Decomposition temperature No information available
Viscosity of Product No information available
Dynamic viscosity No information available

Other information

Liquid Density No information available

10. STABILITY AND REACTIVITY

Reactivity

No adverse reactions expected under normal conditions of use.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

None known

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure Eye contact, Skin contact, Ingestion, Inhalation

Information on likely routes of exposure

Eyes Causes serious eye irritation. May cause redness, itching, and pain.
Skin Causes mild skin irritation. Prolonged contact may cause redness and irritation.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation May cause irritation of respiratory tract. May be harmful if inhaled. May cause drowsiness and dizziness.

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

Skin Corrosion/Irritation May cause skin irritation.
Serious eye damage/eye irritation Causes serious eye irritation.
Sensitization Product is not identified as a sensitizer according to OSHA regulations.
Mutagenic effects Product is not identified as a mutagen according to OSHA regulations.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol 64-17-5	A3	-	Known	X
Hydrogen peroxide 7722-84-1	A3	Group 3	Not Listed	Not Listed

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)
 A3 - Confirmed animal carcinogen with unknown relevance to humans
 IARC (International Agency for Research on Cancer)
 Group 3 - Not classifiable
 NTP (National Toxicology Program)
 Known - Known Carcinogen
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

Reproductive Effects Product is not identified as having reproductive effects according to OSHA regulations.
STOT - single exposure Causes damage to organs through prolonged or repeated exposure.
STOT - repeated exposure Product is not identified as having single target organ toxicity (repeated exposure) according to OSHA regulations.
Aspiration Hazard Product is not identified as an aspiration hazard according to OSHA regulations.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water 7732-18-5	> 90 mL/kg (Rat)	No data available	No data available
Ethyl alcohol 64-17-5	= 7060 mg/kg (Rat)	>20000 mg/kg (rabbit)	124.7 mg/L (rat)
Glycerol 56-81-5	= 12600 mg/kg (Rat)	21900 mg/kg (Rat)	> 570 mg/m ³ (Rat) 1 h
Hydrogen peroxide 7722-84-1	= 1518 mg/kg (Rat)	= 9200 mg/kg (Rabbit)	= 2000 mg/m ³ (Rat) 4 h

81.45% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Ethyl alcohol 64-17-5	No data available	100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50
Glycerol 56-81-5	No data available	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	No data available	500: 24 h Daphnia magna mg/L EC50
Hydrogen peroxide 7722-84-1	2.5: 72 h Chlorella vulgaris mg/L EC50	10.0 - 32.0: 96 h Oncorhynchus mykiss mg/L LC50 static 16.4: 96 h Pimephales promelas mg/L LC50 18 - 56: 96 h Lepomis macrochirus mg/L LC50 static	No data available	18 - 32: 48 h Daphnia magna mg/L EC50 Static 7.7: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated Packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. TRANSPORT INFORMATION

DOT

UN-No	1170
Proper Shipping Name	Ethanol solution
Hazard Class	3
Packing Group	II
Special Provisions	24, IB2, T4, TP1

15. REGULATORY INFORMATION

California Proposition 65

The list of Proposition 65 chemicals lists "Ethyl alcohol in alcoholic beverages" and is intended to cover only that use of Ethyl Alcohol.

State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethyl alcohol 64-17-5	X	X	X
Glycerol 56-81-5	X	X	X
Hydrogen peroxide 7722-84-1	X	X	X

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

Preparation Date: 12-May-2020
Revision Date: 19-May-2020
Revision Note: None

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

End of SDS