

Chlor-EX

2% Chlorhexidine

Material safety data sheet (MSDS)
Version 1.0 / EN

July 6, 2015



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SECTION 1: THE NAME AND STRUCTURE OF SUBSTANCE OR A MATERIAL

1.1. Product identifier

Product Name	DSI Essentials – Chlorhexidine Solution 2%.
Physical State	Mixture.

1.2. Structure

Product Type	Clear blue liquid with a pleasant soap type odor
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DATA ON THE ORGANIZATION-MANUFACTURER OR THE SUPPLIER

1.3. Details of the supplier of the safety data sheet:

Company Name	DSI Ltd.
Company Address	59 haAvoda str., Ashdod 7706300 Israel
Contact Name	Shlomi Krasner
Phone / Fax	+972.893.172.35
E-mail	info@dsisrael.com

Emergency telephone number:

Phone / Fax	+972.893.172.35
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SECTION 2: KINDS OF DANGEROUS INFLUENCE AND A CONDITION OF THEIR OCCURRENCE

2.1. EMERGENCY OVERVIEW: This product is a clear blue liquid with a pleasant soap type odor.

Health Hazards: Contact with the eye may cause damage. May cause skin irritation.

Flammability Hazards: This product is a non-combustible liquid with a flash point of >200°F (93°C)

Reactivity Hazards: None known

Environmental Hazards: The Environmental effects of this product have not been investigated.

Hazard Symbols



Signal Word: Warning!

2.2. GHS LABELING AND CLASSIFICATION:

CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 AND the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:

Index Number:

EC# 231-791-2 This substance is not classified in the Annex VI of Directive 67/548/EEC

EC# 242-354-0 This substance is not classified in the Annex VI of Directive 67/548/EEC

Substances not listed either individually or in group entries must be self classified.

Component(s) Contributing to Classification(s)

All Ingredients

2.3. LABEL ELEMENTS:

GHS Hazard Classification(s):

Eye Irritation Category 2A

Skin Irritation Category 2

Aquatic Acute Category 2

Hazard Statement(s):

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H401: Toxic to aquatic life.

Precautionary Statement(s):

P264: Wash thoroughly after handling.

P280: Wear gloves and eye protection / face protection.

P273: Avoid release to the environment.

3.4. HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with skin or eyes, inhalation and ingestion. The symptoms of overexposure are described below:

ACUTE:

INHALATION: Inhalation of mist or spray may cause respiratory irritation.

CONTACT WITH SKIN: Contact with the skin may cause irritation.

EYE CONTACT: Contact may cause serious eye irritation.

INGESTION: Under normal conditions of intended use, this material is not expected to be an ingestion hazard.

Ingestion may cause gastrointestinal irritation, nausea and vomiting.

CHRONIC: Prolonged contact with skin may cause defatting and dermatitis.

TARGET ORGANS: Acute: Eyes, Skin, Respiratory tract / Chronic: Skin

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

3.1. NOT FLAMMABLE, NOT BURNING, NOT EXPLOSIVE.

Hazardous Ingredients:	WT%	CAS#	EINECS #	GHS Hazard Classification
Water	80-95%	7732-18-5	231-791-2	Not Classified
Chlorhexidine Gluconate	5-10%	18472-51-0	242-354-0	H318 Serious Eye Dam Cat1, Aquatic Acute Cat 1

Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

SECTION 4: MEASURES OF FIRST AID

4.1. DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists or blurred vision occurs.

SKIN CONTACT: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Some individuals may develop skin sensitization from exposure.

4.2. SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: Contact with eyes and skin may cause irritation.

4.3. RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

SECTION 5: MEASURES AND MEANS OF MAINTENANCE OF FIRE SAFETY

5.1. FIRE EXTINGUISHING MATERIALS:

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods below:

Water Spray: Yes	Carbon Dioxide: Yes
Foam: Yes Dry	Chemical: Yes
Halon: Yes	Other: Any "C" Class

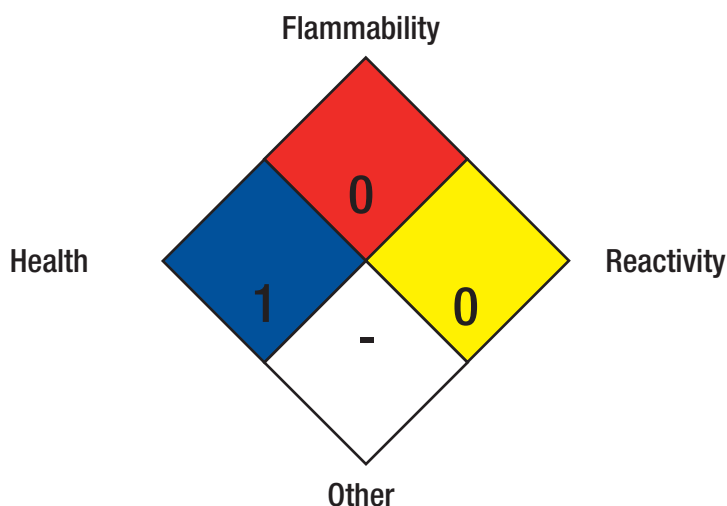
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5.3. SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.



HMIS RATING SYSTEM				
HAZARDOUS MATERIAL IDENTIFICATION SYSTEM				
HEALTH HAZARD (BLUE)			1	
FLAMMABILITY HAZARD (RED)			0	
PHYSICAL HAZARD (YELLOW)			0	
PROTECTIVE EQUIPMENT				
EYES	RESPIRATORY	HANDS	BODY	
	See Sect 8		See Sect 8	
For Routine Industrial Use and Handling Applications				

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

SECTION 6: MEASURES ON PREVENTION OF EXTREME SITUATIONS

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Use cautious judgment when cleaning up spill. Wear suitable protective clothing, gloves, and eye/face protection.

6.2. ENVIRONMENTAL PRECAUTIONS:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

6.3. SPILL AND LEAK RESPONSE:

Stop the flow of material, if this can be done safely. Dike and contain the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate, transfer the liquid and solid diking material to containers for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

SECTION 7: RULES OF THE MANIPULATION AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING:

Use good hygiene practices. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Use good hygiene practices.

7.2. STORAGE AND HANDLING PRACTICES:

Store in original container. Keep container closed. Store in a cool, dry location. Avoid incompatible materials.

7.3. SPECIFIC USES: See section 1.2 for details.

SECTION 8: RULES AND MEASURES ON A SAFETY OF THE USER

8.1. EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Water	7732-18-5	Not Listed	Not Listed
Chlorhexidine Gluconate 1	8472-51-0	Not Listed	Not Listed

8.2. EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan.

Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical splash goggles are recommended to avoid contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Chemical resistant gloves are recommended to prevent contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use as appropriate to prevent skin contact. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR:	This product is a clear blue liquid.
ODOR:	Pleasant odor.
ODOR THRESHOLD:	Not Available
pH:	4.50-6.00

MELTING/FREEZING POINT:	Not Available
BOILING POINT:	Not Available
FLASH POINT:	> 200°F (93°C).
EVAPORATION RATE (n-BuAc=1):	Not Available
FLAMMABILITY (SOLID, GAS):	Non-Flammable
UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS:	Not Available
VAPOR PRESSURE (mm Hg @ 20°C (68°F):	Not Available
VAPOR DENSITY:	Not Available
RELATIVE DENSITY:	Not Available
DENSITY:	Not Available
SOLUBILITY IN WATER:	Soluble
SPECIFIC GRAVITY:	1.01
WEIGHT PER GALLON:	8.3lbs/gal (3.8kg/gal)
PARTITION COEFFICIENT (n-octanol/water):	Not Available
AUTO-IGNITION TEMPERATURE:	Not Available
DECOMPOSITION TEMPERATURE:	Not Available
VISCOSITY:	Not Available
VOC g/l / Lb/gal:	None

9.2. OTHER INFORMATION: No additional information available.

SECTION 10: STABILITY AND CHEMICAL ACTIVITY

10.1. REACTIVITY: This product is not reactive.

10.2. STABILITY: Stable under conditions of normal storage and use.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

10.4. CONDITIONS TO AVOID: Incompatible materials

10.5. MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizing agents.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products include oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA: No LD50 available.

SUSPECTED CANCER AGENT: None of the ingredients within this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are considered to be, or suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to skin, eyes or respiratory system.

SENSITIZATION TO THE PRODUCT: This product is not a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Contact with eye may cause damage.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Prolonged exposure can be irritating skin.

ASPIRATION HAZARD: None

SECTION 12: INFLUENCE ON AN ENVIRONMENT

12.1. TOXICITY:

Chlorhexidine Gluconate	18472-51-0	EC50 - 0.087 mg/l 96h	Daphnia
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12.2. PERSISTENCE AND DEGRADABILITY: No specific data available on this product.

12.3. BIOACCUMULATIVE POTENTIAL: No specific data available on this product.

12.4. MOBILITY IN SOIL: No specific data available on this product.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT: No specific data available on this product.

12.6. OTHER ADVERSE EFFECTS: No specific data available on this product.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.7. WATER ENDANGERMENT CLASS: Not water endangering in accordance with EU Guideline 91/155-EWG.

12.8. SPECIFIC AVAILABLE COMPONENT INFORMATION: No additional data available.

SECTION 13: RECYCLING AND A BURIAL PLACE OF WASTE (RESTS)

13.1. WASTE TREATMENT METHODS: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2. EU Waste Code: Not determined.

SECTION 14: RULES OF TRANSPORTATION

US DOT, IATA, IMO, ADR: U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows:

14.1. PROPER SHIPPING NAME: Not Regulated

14.2. HAZARD CLASS NUMBER and DESCRIPTION: N/A

14.3. UN IDENTIFICATION NUMBER: N/A

14.4. PACKING GROUP: N/A

14.5. DOT LABEL(S) REQUIRED: N/A

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: N/A

RQ QUANTITY: None

14.6. MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.7. SPECIAL PRECAUTIONS FOR USER: None

14.8. INTERNATIONAL TRANSPORTION:

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

14.9. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND IBC CODE:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15: OTHER INFORMATION

Since the working conditions of the final user are unknown, the information presented in this safety data sheet is based on the current level of our knowledge, based on national and general standards.

The product should not be used for any other purpose than those indicated under heading without first receiving written instructions for use. The user must take all necessary measures to comply with the requirements and rules of the law. The information in this safety data sheet should be considered as a description of the safety requirements that apply to our product and does not guarantee its properties.