


1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Chlorhexidine Gluconate 4%/w/w Solution	
Other Means of Identification:	Chlorhexidine Gluconate 4% Solution	
Distributed By:	AVA Inc. 7051 S Adams St Willowbrook IL 60527-7592, USA	Phone Number: 1-800-581-2528
Web Site Address:	www.avapharma.com	
Emergency Contact:	CHEMTREC	1-800-424-9300 1-703-527-3887
Intended Use:	Skin antiseptic	
Restrictions on Use:	Reserved for industrial and professional use.	
Product Dilution Information:	Product is sold ready to use.	

2. HAZARDS IDENTIFICATION

GHS Classification:	Flammable liquids: Category 3 Eye irritation: Category 2A Carcinogenicity: Category 2
GHS Label Elements:	
GHS Signal Word:	Warning
GHS Hazard Phrases:	H226 - Flammable liquid and vapor. H319: Causes serious eye irritation H351: Suspected of causing cancer
GHS Precautionary Phrases:	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233: Keep container tightly closed. P240: Ground/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. P264: Wash skin thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection.
GHS Response Phrases:	P303: IF ON SKIN (or hair): P361: Remove/Take off immediately all contaminated clothing. P353: 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. P308 + P313: IF exposed or concerned: Get medical advice/attention. P337 + P313: If eye irritation persists: Get medical advice/attention. P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
GHS Storage and Disposal Phrases:	P403 + P235 + P405: Store in a well-ventilated place. Keep cool. Store locked up. P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.
Potential Health Effects (Acute and Chronic):	Hazards not otherwise classified (HNOC) or not covered by GHS -none. Chronic: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
61788-90-7	amines, coco alkyldimethyl, n-oxides	Trade Secret	GG6035000
67-63-0	Isopropanol	Trade Secret	NT8050000
18472-51-0	Chlorhexidine gluconate	Trade Secret	DU1950000
57-55-6	Propylene glycol	Trade Secret	TY2000000
68603-42-9	amides, coco, n,n-bis(hydroxyethyl)	Trade Secret	GG6200000
111-42-2	Diethanolamine	Trade Secret	KL2975000

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
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In Case of Inhalation:	If breathed in, move person into fresh air. If symptoms occur or irritation persists, get medical attention.
In Case of Skin Contact:	Wash off with soap and plenty of water. Remove contaminated clothing and wash before reuse. If symptoms occur or irritation persists, get medical attention.
In Case of Eye Contact:	Flush eyes with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms occur or irritation persists, get medical attention.
In Case of Ingestion:	Rinse mouth with water. If symptoms occur or irritation persists, get medical attention.
Signs and Symptoms Of Exposure:	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
Indication of any immediate medical attention and special treatment needed:	No data available
Note to Physician:	Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash Pt:	No data.
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	No data.
Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. Material will not burn. Wear self contained breathing apparatus for fire fighting if necessary.
Flammable Properties and Hazards:	Carbon oxides.
Hazardous Combustion Products:	Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx)

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Remove all sources of ignition. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. No special environmental precautions required.
Steps To Be Taken In Case Material Is Released Or Spilled:	Use proper personal protective equipment as indicated in Section 8. Do not allow contact with soil, surface or ground water. Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Avoid contact with skin and eyes. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Wash hands thoroughly after handling.
Precautions To Be Taken in Storing:	Keep away from heat and sources of ignition. Keep in a cool, well ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. Store at USP Controlled Room Temperature. Keep from freezing.
Other Precautions:	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
67-63-0	Isopropyl Alcohol	ACGIH	200 PPM	TWA
		ACGIH	400 PPM	STEL
		NIOSH REL	400 PPM; 980 mg/m3	TWA
		NIOSH REL	500 PPM; 1,225 mg/m3	SETL
		OSHA Z1	400 PPM; 980 mg/m3	TWA
57-55-6	Propylene Glycol	IHA WEEL	10 mg/m3	TWA
111-42-2	Diethanolamine	ACGIH	1 mg/m3	TWA (Inhalable fraction & vapor)
		NIOSH REL	3 PPM; 15mg/m3	TWA

Respiratory Equipment (Specify Type):	No personal respiratory protective equipment normally required.
Eye Protection:	Wear eye protection/ face protection.
Protective Gloves:	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Other Protective Clothing:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Engineering Controls (Ventilation etc.):	Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.
Environmental Exposure Controls:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Other:	Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid
Appearance and Odor:	Clear, Amber. Floral.
pH:	6.0 – 7.5
Melting Point:	No Data.
Boiling Point:	No Data.
Flash Pt:	No Data.
Evaporation Rate:	LEL: No data. UEL: No data.
Flammability (solid, gas):	No Data.
Explosive Limits:	No Data.
Vapor Pressure (vs. Air or mm Hg):	No Data.
Vapor Density (vs. Air = 1):	No Data.
Specific Gravity (Water = 1):	No Data.
Density:	~ 1.01 G/ML
Solubility in Water:	No Data.
Saturated Vapor Concentration:	No Data.
Octanol/Water Partition Coefficient:	No Data.
Autoignition Pt:	No Data.
Decomposition:	No Data.
Temperature:	No Data.
Viscosity:	No Data.
Explosive Properties:	No Data Available.
Oxidizing Properties:	No Data Available.
Information with regard to primary physical hazard:	No Data Available.

10. STABILITY AND REACTIVITY

Stability:	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>
Conditions To Avoid - Instability:	Heat, flames and sparks.
Incompatibility - Materials To Avoid:	Strong oxidizing agents.
Hazardous Decomposition or Byproducts:	In the event of fire: see section 5. Hazardous decomposition products formed under fire conditions. -Carbon oxides. – Nitrogen oxides (NOx)
Possibility of Hazardous Reactions:	Will occur <input type="checkbox"/> Will not occur <input checked="" type="checkbox"/>
Conditions To Avoid - Hazardous Reactions:	Heat, flames and sparks.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:	Eye contact
Potential Health Effects:	Eyes: Causes serious eye irritation. Skin: Health injuries are not known or expected under normal use. Ingestion: Health injuries are not known or expected under normal use. Inhalation: Health injuries are not known or expected under normal use. Chronic Exposure: Suspected of causing cancer.
Experience with Human Exposure:	Eye Contact: Redness, Pain, Irritation Skin Contact: No symptoms known or expected. Ingestion: No symptoms known or expected. Inhalation: No symptoms known or expected.
Toxicity: Product:	Acute oral toxicity: Acute toxicity estimate : > 5,000 mg/kg Acute inhalation toxicity: No data available Acute dermal toxicity: Acute toxicity estimate : > 5,000 mg/kg Skin corrosion/irritation: No data available Serious eye damage/eye irritation: Eye irritation Respiratory or skin sensitization: No data available Carcinogenicity: IARC: Group 2B: Possibly carcinogenic to humans amides, coco, n,n-bis(hydroxyethyl): CASRN 68603-42-9 Diethanolamine: CASRN 111-42-2 OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

	NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	
	Reproductive effects:	No data available	
	Germ cell mutagenicity:	No data available	
	Teratogenicity:	No data available	
	STOT-single exposure:	No data available	
	STOT-repeated exposure:	No data available	
Ingredients	Acute inhalation toxicity:	Isopropanol	
		4 h LC50 Rat: > 30 mg/l;	Test atmosphere: vapor
		Chlorhexidine gluconate	
		LC50 Rat: 0.365 mg/l;	Test atmosphere: dust/mist
		Propylene glycol	
		4 h LC50 Rat: > 158.5 mg/l;	Test atmosphere: dust/mist

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Environmental Effects:	Very toxic to aquatic life with long lasting effects.	
Product:	Toxicity to fish:	No data available	
	Toxicity to daphnia and other aquatic invertebrates:	No data available	
Ingredients:	Toxicity to algae:	No data available	
	Toxicity to fish	amines, coco alkyldimethyl, n-oxides	
		96 h LC50 Fish: 1 mg/l	
		Isopropanol	
		96 h LC50 Pimephales promelas: 9,640 mg/l	
		Propylene glycol	
		96 h LC50: > 10,000 mg/l	
		amides, coco, n,n-bis(hydroxyethyl)	
		96 h LC50 Fish: 3.6 mg/l	
	Toxicity to daphnia and other aquatic invertebrates:	Isopropanol	
		LC50 Daphnia magna (Water flea): > 10,000 mg/l	
		Chlorhexidine gluconate	
		48 h EC50: 0.06 mg/l	
		Propylene glycol	
		48 h EC50: 18,340 mg/l	
		Diethanolamine	
		48 h EC50 Daphnia: 65.5 mg/l	
	Toxicity to algae:	Propylene glycol	
		96 h EC50: 19,000 mg/l	
Persistence and degradability:	No data available		
Bioaccumulative potential:	No data available		
Mobility in soil:	No data available		
Other adverse effects:	No data available		

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:	Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. RCRA P-Series: None listed. RCRA U-Series: None listed. Product.		
Waste Disposal Considerations:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers. Dispose of in accordance with local, state, and federal regulations.		
RCRA Waste ID Code:	D001		

14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

LAND TRANSPORT (US DOT):	
DOT Proper Shipping Name:	Not regulated as a hazardous material.
DOT Hazard Class:	
UN/NA Number:	
Packing Group:	III
LAND TRANSPORT (Canadian TDG):	
TDG Shipping Name:	Not regulated as a hazardous material.
UN Number:	
Packing Group:	III

Hazard Class:
TDG Classification:

SEA TRANSPORT (IMDG/IMO)

Description of the goods: FLAMMABLE LIQUID, N.O.S. (Isopropanol)
UN Number: 1993
Packing Group: III
Hazard Class: 3
TDG Classification: Yes

15. REGULATORY INFORMATION

EPCRA: Emergency Planning an Community Right-to-Know


CERCLA Reportable Quantity: Diethanolamine Component RQ (lbs): 100
CASRN 111-42-2 Calculated Product RQ (lbs): 71428

SARA 304 Extremely Hazardous Substances Reportable Quantity: This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Carcinogenicity

SARA 302: This material does not contain any components with a section 302 EHS TPQ.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65:  **WARNING:** This product can expose you to chemicals including amides, coco, n,nbis(hydroxyethyl), Diethanolamine, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

Country	Inventory Name	Inventory Status
Switzerland	New notified substances and declared preparations:	The mixture contains substances listed on the Swiss Inventory
United States	TSCA Inventory:	On the inventory, or in compliance with the inventory
Australia	Inventory of Chemical Substances (AICS):	On the inventory, or in compliance with the inventory
New Zealand	Inventory of Chemical Substances:	On the inventory, or in compliance with the inventory
Japan	Existing and New Chemical Substances Inventory:	Not determined.
Korea	Korean Existing Chemicals Inventory (KECI):	Not determined.
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Not determined.
China	Inventory of Existing Chemical Substances in China (IECSC):	Not determined.
Taiwan	Taiwan Chemical Substance Inventory (TCSI):	Not determined.

16. OTHER INFORMATION

Revision Date: 01 March 2023

Additional Information: No Data Available.

Company Policy or Disclaimer: The above information is regarded appropriate but does not imply to be all inclusive and shall be used only as a guide. The information in this document is based on our current knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. AVA Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.