# This SDS packet was issued with item: 078037223

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078912905

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078037231

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FAX NO. 800 846 8626

### P. 02

P. 02

800 5th Street NW Gen PO Box 518 Prep	on rgency Telephone N eral Information No. aration Date: slon Date: s to aid in the control d Disinfectant (Fran	.: (515) 955-460 May 29, 198 December 12, 199 of many common
Fort Dodge Laboratories Eme 800 5h Street NW Gen PO Bax 518 Prep Fort Dodge, IA 50301 Revi IPRODUCT NAME: Nolvasan® Solution 1. I PRODUCT NAME: Nolvasan® Solution 1. Z USE: A scented disinfectant for the disinfection of inanimate object microbiological agents. 1. SIZE: 1 pint and 1 gallon containers. 1. SIZE: 1 pint and 1 gallon containers. 1. SYNONYMS: Nolvasan® Scented Disinfectant, Chlorasan® Scente SUCOMPOSITION / INFORMATION ON INCREDI NGREDIENT NAME SYNONYMS "Chlorheridine Diasetata topropyl Alcohol Sent dy, surfanants, and other ingredient conidered to be tota scents (there are considered to be non-texardow). 3. HAZARD TIDENTIFICATION 3. POTENTIAL HEALTH EFFECTS: Adverse health effects associ ingredient isopropyl alcohol. 3. L. ACUTE EFFECTS: INHALATION: Prolonged or repeated inhalation of high concent irritation of the mucous membranes and upper to headache. INGESTION: May be harmful if swallowed, causing gastrointe	rgency Telephone N eral Information No. aration Date: sion Date: s to aid in the control d Disinfectant (Fran ENTS (EIndicates <u>CAS NO.</u> 56-95-1 67-63-0	.: (515) 955-46( May 29, 198 December 12, 199 of many common hklin Laboratories) active impredient) <u>CONCENTRATI(</u> 2.0% 7.9%
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1. 1       PRODUCT NAME:       Nolvasan@ Solution         1. 2       USE:       A scented disinfectant for the disinfection of inanimate object microbiological agents.         1. 3       SIZE:       1 pint and 1 gallon containers.         1. 4       SYNONYMS:       Nolvasan@ Scented Disinfectant, Chlorasan@ Scented         NGREDIENT NAME       SYNONYMS:       Nolvasan@ Scented Disinfectant, Chlorasan@ Scented         'Chlorhexidine Diasetala isopropyl Alcohol       Chlorhexidine Acatate Lopropanol         'Chlorhexidine Diasetala isopropyl Alcohol       Chlorhexidine Acatate Lopropanol         'Sent, dye, surfactants, end other ingredients considered to be non-hazardous).       Chlorhexidine Acatate Lopropanol         Sent, dye, surfactants, end other ingredients considered to be non-hazardous).       Chlorhexidine Acatate Lopropanol         Sent, dye, surfactants, end other ingredient isopropyl alcohol.       NA         Sent, dye, surfactants, end other ingredient isopropyl alcohol.       NA         Sent, dye, surfactants, end other ingredient isopropyl alcohol.       NA         Sent, dye, surfactants, end other ingredient isopropyl alcohol.       NA         Sent, dye, surfactants, end other ingredient isopropyl alcohol.       NA         Sent, dye, causing gastroline.       NA         Sent, dye, causing gastroline.       NGESTION:	d Disinfectant (Fran CNTS (Endicated <u>CAS NO.</u> 56-95-1 67-63-0	aklin Laboratories) Active impredient) CONCENTRATI( 2.0% 7.9%
<ul> <li>1.2 USE: A scented disinfectant for the disinfection of inanimate object microbiological agents.</li> <li>1.3 SIZE: 1 pint and 1 gallon containers.</li> <li>1.4 SYNONYMS: Nolvasan@ Scented Disinfectant, Chlorasan@ Scented COMPOSITION / INFORMATION ON INGREDIA</li></ul>	d Disinfectant (Fran CNTS (Endicated <u>CAS NO.</u> 56-95-1 67-63-0	aklin Laboratories) Active ingredienti CONCENTRATI( 2.0% 7.9%
nicrobiological agents. 13 SIZE: 1 pint and 1 gallon containers. 14 SYNONYMS: Nolvasan© Scented DisInfectant, Chlorasan© Scenter COMPOSITION (INFORMATION ON INCREDI) COMPOSITION (INFORMATION ON INCREDI) COMPOSITION (INFORMATION ON INCREDI) Composition Diagetata isopropyl Alcohol Scent, dye, surfactants, and other ingredients considered to be trade secrets (these are considered to be non-hezardow). 3.1 POTENTIAL HEALTH EFFECTS: Adverse health effects associ ingredient isopropyl alcohol. 3.1. ACUTE EFFECTS: INHALATION: Prolonged or repeated inhalation of high concent irritation of the mucous membranes and upper re headache. NGESTION: May be harmful if swallowed, causing gastrointee	d Disinfectant (Fran CNTS (Endicated <u>CAS NO.</u> 56-95-1 67-63-0	aklin Laboratories) Active ingredienti CONCENTRATI( 2.0% 7.9%
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1.4 SYNONYMS:       Nolvasan@ Scented Disinfectant, Chlorasan@ Scented         NGREDIENT NAME       SYNONYMS         "Chlorhexidine Diacetata isopropyl Alcohol Scent, dys, surfactants, and other ingredients sonaidered to be trade secrets (these arc considered to be non-hezardow).       Chlorhexidine Acetate isopropanol NA         SI.       HAZARD HDENTIFICATION       Chlorhexides         3.1       POTENTIAL HEALTH EFFECTS:       Adverse health effects associ ingredient isopropyl alcohol.         3.1.       POTENTIAL HEALTH EFFECTS:       Adverse health effects associ ingredient isopropyl alcohol.         3.1.       POTENTIAL HEALTH EFFECTS:       Adverse health effects associ ingredient isopropyl alcohol.         3.2.1.1       ACUTE EFFECTS:       NHALATION:         INHALATION:       Prolonged or repeated inhalation of high concent irritation of the mucous membranes and upper re headache.         INGESTION:       May be harmful if swallowed, causing gastrointes	EN TS (FIndicates CAS NO. 56-95-1 67-63-0	2014 Concentrations) <u> Concentration</u> 2.0% 7.9%
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<ul> <li><sup>1</sup>Chlorhexidine Diacetata isopropyl Alcohol Scent, dye, surfactants, and other ingredients considered to be trade secrets (these are considered to be non-hazardous).</li> <li><b>1AZARD IDENTIFICATION</b></li> <li><b>EMERGENCY OVERVIEW</b></li> <li><b>3.1</b> POTENTIAL HEALTH EFFECTS: Adverse health effects associ ingredient isopropyl alcohol.</li> <li><b>3.1</b> ACUTE EFFECTS: INHALATION: Prolonged or repeated inhalation of high concent irritation of the mucous membranes and upper re headache.</li> <li>INGESTION: May be harmful if swallowed, causing gastrointee</li> </ul>	56-95-1 67-63-0	2.0% 7.9%
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<ul> <li>be non-hazardous).</li> <li>SIZE HAZARD IDENTIFICATION</li> <li>EMERGENCY OVERVIEW</li> <li>3. 1 POTENTIAL HEALTH EFFECTS: Adverse health effects associaning redient isopropyl alcohol.</li> <li>3. 1.1 ACUTE EFFECTS: INHALATION: Prolonged or repeated inhalation of high concerning irritation of the mucous membranes and upper reheadache.</li> <li>INGESTION: May be harmful if swallowed, causing gastrointee</li> </ul>		
<ul> <li>3. 1.1 ACUTE EFFECTS:</li> <li>INHALATION: Prolonged or repeated inhalation of high concent irritation of the mucous membranes and upper repeated.</li> <li>INGESTION: May be harmful if swallowed, causing gastrointer</li> </ul>	ated with this produc	t are linked to the
INHALATION: Prolonged or repeated inhalation of high concent irritation of the mucous membranes and upper re- headache. INGESTION: May be harmful if swallowed, causing gastrointer		
irritation of the mucous membranes and upper re headache. INGESTION: May be harmful if swallowed, causing gastrointe		
	trations of vapors may spiratory tract, nause	y be harmful, causing a, vomiting, and
	stinal irritation, naus	ea, vomiting, and
SKIN: May be mildly irritating to the skin, causing dry	ng.	
EYE: Extremely irritating to the eyes.		
3. 1) TARGET ORGAN EFFECTS (SUBCHRONIC/CHRONIC): Ner	ves/Kidneys	
3. 3. CARCINOGENIC EFFECTS: This	product is not known	n to be carcinogenic.
3_1. REPRODUCTIVE/TERATOGENIC EFFECTS: There are no adv associated with D Obtained by Global Safety Management, www.globebisgetige investigated.		, the effects of this

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Produ	ict Name: Noivasan® S Page 2
3.2	CARCINOGENICITY STATUS: This product is not known to be carcinogenic.
3.3	MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Respiratory ailments or skin disorders.
	IRS EALIS MEASURES
INHA	LATION: Remove victim to fresh air. Administer oxygen if necessary. Seek medical attention immediately.
INGE	STION: Seek medical attention immediately.
SKIN	Wash affected area thoroughly with soap and water. Consult a physician.
E¥I:	Seek medical anention immediately.
	IN ENTERING NEASERES
5.1	FLASH POINT: 103.5° F METHOD: Open Cup
5.1	AUTOIGNITION TEMPERATURE: Not established.
5.1	FLAMMABILITY LIMITS: (limits below are fot isopropyl alcohol) LOWER LIMIT: 2.5% UPPER LIMIT: 12%
5.4	UNUSUAL FIRE AND EXPLOSION HAZARDS: This product may release toxic vapors when subjected to fire conditions.
5.1	COMMON EXTINGUISHING METHODS: Alcohol foam, water spray, carbon dioxide, dry chemical.
5.6	FIRE FIGHTING PROCEDURES: Firefighers should take standard precautions when fighting fires involving this material, including the use of SCBA.
	COMPANY A PROPERTY OF COMPANY AND A
suitable	all spills involving this product (i.e., those resulting from normal usage), wipe up the spill using paper towels or other e material. Wash area with water. For large spills, eliminate all sources of ignition. Contain the spill using booms, or absorbent material to prevent releases into waterways or onto land. Collect spilled material for future disposal.
	AMOLING ASSESTORACE
Store in	a a cool, dry place away from fire or flame. Keep out of the reach of children.
	RESERVE CONTRACTOR STRUCTURE CONTRACTOR STRUCTURE
8.1	EXPOSURE GUIDELINES:
	INGREDIENT NAME OSHA PEL/STEL ACGIH TLY/STEL
	Isopropyl Alcohol 400 ppm/500 ppm 400 ppm/500 ppm
	Chlorhexidine Asstalfed by Global Safety Management, whe goe almsdslibrary.com, (877) 683-7460 NE/NE

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Produ	et Name: Nolvasan SO Page
8,2	VENTILATION: Special ventilation provisions are not considered necessary for normal usage of this product. If large quantities are being handled, local exhaust ventilation should be provided.
8.3	RESPIRATORY PROTECTION: Respiratory protection is not considered necessary for normal usage of this product. If necessary, use a NIOSH-approved chemical cartridge respirator fitted with organic vapor cartridges.
8,4	PROTECTIVE GLOVES: Latex gloves are recommended.
8.5	EYE PROTECTION: Safety glasses with side shields or safety goggles are recommended.
8.6	OTHER: NA
9. P	BASICAL AND THE MICAL PROPERTIES
9.1	APPEARANCE AND ODOR: Clear, blue, scented liquid.
9.2	MELTING POINT: Not established.
<b>9</b> .3	BOILING POINT: Not established.
9.4	SPECIFIC GRAVITY / DENSITY: 0.98
9.5	VAPOR DENSITY: Not established.
9.6	VAPOR PRESSURE: Not established.
<b>9,</b> 7	SOLUBILITY • WATER: Complete • OTHER SOLVENTS: Not =stablished.
9.8	DECOMPOSITION TEMPERATURE: Not established.
9.9	VISCOSITY: Not established
9.10	pH: Not established
1	A HULL IY AND REACTLY IY
10.1	STABILITY: This product is considered stable under normal conditions.
10.2	HAZARDOUS DECOMPOSITION PRODUCTS: This product may release toxic vapors when subjected to fire conditions.
10.3	CONDITIONS TO AVOID: Avoid exposing this product to fire, flame, or excessive heat.
10.4	MATERIALS AND SUBSTANCES TO AVOID Avoid contact with strong acids or bases.
12	HANICOLOGICAL SINIBORMA TION
1 1.1	ACUTE DATA: Toxicological data presented below is for the ingredients isopropyl alcohol and chlorhexidine diacetate.
	INHALATION: Prolonged or repeated inhalation of high vapor concentrations may be harmful.
	INGESTION: May be harmful if swallowed. (Isopropyl Alcohol) Oral LD50 (Rats) - 5,045 mg/Kg (Chlorhoxidine Diacotate) Oral LD50 (Mouse) - 2 g/Kg.
	EYES: Extremely irritating to the eyes.
	Obtained by Global Safety Management, www.globalmsdslibrary.com, (877) 683-7460 SKIN: May be implained to the skin.

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Product Name: Nolvasan@ S	Page 4
11.2 TARGET ORGAN EFFECTS DATA (SUBCHRONIC/CHRONIC): Nerves/Liver	
11.3 CARCINOGENIC EFFECTS DATA: This product is not known to be carcinogenic.	
11.4 MUTAGENIC EFFECTS DATA: This product is not known to be mutagenic.	
11.5 REPRODUCTIVE / TERATOGENIC EFFECTS DATA: There are no adverse reproductive or the effects associated with this product. However, the effects of exposure to this product on pregnant we been thoroughly investigated.	
A RANSHOR ADDREAD TON THE READ AND A	
12-1 U.S. DEPARTMENT OF TRANSPORTATION (DOT): This product is classified as a flamm under U.S. DOT regulations. Cons regulations for specific shipping rec	uli DOT
12.2 INTERNATIONAL TRANSPORTATION REGULATIONS: This product is classified as a fla under international transportation Consult international regulation: shipping requirements.	n regulations.
STREET CHIEVE HEAD AND AND AND AND AND AND AND AND AND A	
13.1 FEDERAL REGULATIONS: This product is a U.S. EPA registered pesticide (EPA Reg, No. 11 product is classified as a hazardous waste under U.S. EPA RCRA	
13.2 STATE REGULATIONS: NA	
SCHOOLING ROAD TO STATE	
14.1 HAZARD RATINGS	
NFPA*: Health - 1 Flammability - 2 Reactivity - 0 Special Hazards - NA Health - 1 Flammability Reactivity -0 Special Hazards - NA Health - 1 Flammability Reactivity -0 Personal Protection Health - 1 Flammability Reactivity -0 Personal Protection	
* A hazard rating has not been developed by NFPA for this product. NFPA-derived rating is based on N evaluation criteria.	FPA hazard
14.2 PREPARATION AND REVISION INFORMATION	
Fort Dodge Laboratories, Department of Safety	
The information and recommendations presented in this MSDS are based on sources believed to be accurate. However, Fort Dodge Laboratorie Subdidiaries assumes no liability for the accuracy, completeness or suitability of this information. It is the product user's responsibility to determ the information for their perticular purposes.	o, its Divisions and/or tine the suitability of
The hazard ratings included in this MSDS have been developed based on NFPA and HMIS ariterie as well as professional judgement. This info so lely for the use of individuals trained in these hezard rating systems.	rmation is intended
This groduet should only be used by. or under the supervision of, a person trained and qualified to administer the product. Please refer to the p insert for indications or contraindications for use, and for desage information. Obtained by Global Safety Management, www.globalmsdslibrary.com, (877) 683-7469st Pag	



## MATERIAL SAFETY DATA SHEET

Product Id:	RM1000398	Revision Dat	e: 5/9/2005	Print Date: C	7/26/2005
1. CH	1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION				
Product Code:	RM1000398				
Product Name:	Nolvasan S				
Supplier:	Fort Dodge Animal He 800 5th Street NW PO Box 518 Fort Dodge, IA 50501 General Information N Emergency Telephone	√o.: (515) 955-4600			
Emergency Telephone I		424-9300			
General Telephone Nur	nber: (515)	955-4600			
Prepared By:	Environmental, Health	n + Safety			
2.	COMPOSITIO	N/INFORMA	TION ON I	NGREDIENT	[S
Components	Weight %	ACGIH TWA:	CAS-No.	Wyeth OEG:	Units for TWAs, STELs, ACGIH, OSHA:
Inert Ingredients 0000-00-0	90.1	NA	Various	NA	mg/m3
Isopropyl Alcohol 67-63-0	7.9	400 ppm	67-63-0	Not Established	mg/m3
Chlorhexidine Acetate 56-95-1	2	None	56-95-1	Not Established	mg/m3

### 3. HAZARDS IDENTIFICATION

Inhalation:	None
Skin Contact:	None known
Ingestion:	Harmful if swallowed.

Product Id:

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Product Name: б

Nolvasan S

Eye Contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lens if present. If redness or irritation persists have eyes examined by a doctor immediately.

4. FIRST AID MEASURES		
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lens if present. If redness or irritation persists have eyes examined by a doctor immediately.	
Skin Contact:	Flush skin with plenty of soap and water for at least 15 minutes. Remove all contaminated clothing and shoes. Get medical attention if symptoms persist.	
Inhalation:	No specific treatment, treat symptomatically. If breathing is difficult, give oxygen. If respiratory arrest occurs provide artificial respiration and seek immediate medical assistance.	
Ingestion:	No specific treatment, treat symptomatically. Call medical doctor or poison control center immediately if large quantities are ingested.	
Aggravated Conditions:	None known.	
Notes to Physician:	Direct treatment at control of symptoms.	

### 5. FIRE FIGHTING MEASURES

Extinguishing Media and Fire Fighting<br/>Instructions:Follow your company's procedures. Use an extinguishing agent suitable for the<br/>surrounding class of fire.Special Hazards:None. Dispose of fire debris and contaminated fire fighting water in accordance<br/>with regulations.

## Personal Protective Equipment: Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

Methods For Cleaning Up:Follow your company's spill procedures. Keep people out of area. Put on<br/>appropriate personal protective equipment (See Section 8). Use a tool to scoop<br/>up and put into appropriate labeled waste container.Personal Precautions:Put on appropriate personal protective equipment (see Section 8).

Environmental Precautions: No special measures are typically indicated.

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7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

No special technical measures required when product is used as directed on label or package insert.

Product Id:

RM1000398 Product Name: No Page 2 of 6

Nolvasan S

 Safe Handling Advice:
 Avoid contact with eyes, skin, and clothing. Avoid generating or breathing product aerosol. Wash after handling.

 Storage
 Storage

 Technical Measures/Storage Conditions:
 Store tightly closed in original container. Keep containers in a well ventilated, secure location.

 Incompatible Products:
 No special restrictions on storage with other products

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures:** 

General ventilation is typically sufficient to keep airborne levels below established values when product is used as directed on label or on package insert. Provide eye wash and quick drench shower close to work station. Clean, appropriately launder, or dispose of all potentially contaminated work clothing, foot wear, and protective equipment after use.

Personal Protective Equipment

Respiratory Protection:	Respirator selection must be based on anticipated exposure levels, product hazards, and the safe working limits of the selected respirator. A respirator is not needed under normal and intended conditions of product use. If the product is to be used to aerosol fogging, persons entering the room should use a NIOSH approved respirator filted with pesticide cartridges with a protection factor suitable for the exposure levels involved.
Hand Protection:	gloves. Chemical resistant.
Skin and Body Protection:	Lab coat.
Eye Protection:	safety glasses, goggles, face-shield or other full-face protection where potential exists for direct exposure to aerosols or splashes.
Hygiene Measures:	Avoid contact with skin, eyes and clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	clear blue
Odor:	No information available
pH:	Not available.
Boiling Point/Range:	Not applicable
Melting Point/Range:	May start to soldify at -86 deg. C (-122.8 deg. F) based on data for isopropanol.
Density:	0.98
Vapor Density:	Weighted average: 2.07 (Air=1)
Physical State:	LIQUID
Vapor Pressure:	33 mmHg (@22 deg. C)
Viscosity	Not applicable
Partition Coefficient:	Not applicable
Solubility:	Easily soluble in cold water, hot water.
Solubility in Other Solvents:	None known

Product Id:

RM1000398 Product Name: Page 3 of 6 Nolvasan S

Flash Point:
Explosion limits
- upper
- lower
Autoignition Temperature:
Decomposition Temperature:
Dust Explosivity

### Open Cup: 39.722 deg C (103.5 deg F)

no data available no data available Not applicable Not applicable Not applicable.

### **10. STABILITY AND REACTIVITY**

Stability:	no data available
Conditions to Avoid:	Extremely reactive or incompatible with oxidizing agents. reactive with acids, alkalis.
Materials to Avoid:	no data available
Polymerization:	no data available
Hazardous Decomposition Products:	carbon oxides (CO, CO2) nitrogen oxides (NO, NO2) halogenated compounds.

### **11. TOXICOLOGICAL INFORMATION**

LC50/inhalation/rat =	not determined	
Principle Routes of Exposure:	Kidney, Central nervous system.	
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lens if present. If redness or irritation persists have eyes examined by a doctor immediately.	
Skin Contact:	Harmful in contact with skin.	
Ingestion:	Harmful if swallowed.	
Inhalation:	Moderately irritating to the respiratory system. (USA) Irritant (EU) Moderately toxic via inhalation.	
Chronic Toxicity:		
Target Organs	Kidneys, Central Nervous System (CNS).	
Specific Effects:	nausea headache Respiratory tract irritation. allergic reaction.	
Sensitization:	May cause allergic reactions in persons sensitive to chlorhexidine.	
Carcinogenic Effects:	Classified 3 (not classifiable for human) by IARC	
Mutagenic Effects:	Not mutagenic in a standard battery of genetic toxicological tests.	
Product Id:	RM1000398 Product Name: Nolvasan S Page 4 of 6	

Teratogenic Effects:	No known human teratogenic effect.
ReproductiveToxicity:	No evidence of human reproductive effects.
Aggravated Conditions:	None known.
12.	ECOLOGICAL INFORMATION

13	. DISPOSAL CONSIDERATIONS
Environmental Precautions:	No special measures are typically indicated.
Bioaccumulation:	no data available
Mobility:	no data available
Aquatic Toxicity:	No hazardous ingredients
Ecotoxicity Effects:	No hazardous ingredients
Environmental Hazards:	No known significant effects or critical hazards.
Environmental Fate:	Not available.

 Waste/Unused Products:
 Avoid disposal, make attempts to use product completely in accordance with intended use. Incinerate unwanted products and waste materials.

Contaminated Packaging:

Not applicable

### 14. TRANSPORT INFORMATION

### DOT

UN/ID Number:	Not controlled.	
Proper Shipping Name:	Not controlled.	
Hazard Class:	Not controlled.	
Packing Group:	Not controlled.	
DOT Reportable Quantity (lbs):	Not controlled.	
Marine Pollutant:	Not controlled	
15	. REGULATORY INFORMATION	

Indication of Danger:

Not controlled

**Other Regulations:** 

Not controlled

Product Id:

RM1000398 P Page 5 of 6

Product Name: 6

Nolvasan S

### **16. OTHER INFORMATION**

Additional Advice:

Use this product only in accordance with the directions provided on the product label or the package insert.

The information provided in this MSDS is based on current knowledge. However, this does not constitute a warranty by the Company for that information. The product user is responsible for the appropriate and intended handling, use, and disposal of this product in accordance with label or package insert precautions and this information. All materials may present unknown hazards and should be used with caution.

\*\*\* End of Safety Data Sheet \*\*\*

Product Id:

Nolvasan S



Revision date: 13-Aug-2015

Version: 2.7

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

**Product Identifier** 

Material Name: Nolvasan Solution

Trade Name:	
Chemical Family:	
Registration Number:	

NOLVASAN® Mixture EPA Reg. No. 1007-99

 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

 Intended Use:
 Veterinary product used as disinfectant

 Restrictions on Use:
 Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.Zoet100 Campus Drive, P.O. Box 651MerFlorham Park, New Jersey 07932 (USA)193Rocky Mountain Poison and Drug Center Phone: 1-866-531-8896BelProduct Support/Technical Services Phone: 1-800-366-5288

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: VMIPSrecords@zoetis.com Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem Belgium

Emergency telephone number: International CHEMTREC (24 hours): +1-703-527-3887

### 2. HAZARDS IDENTIFICATION

Appearance:

Clear blue liquid

#### Classification of the Substance or Mixture GHS - Classification

Acute Toxicity - Dusts and Mists: Category 4 Acute aquatic toxicity: Category 2 Chronic aquatic toxicity: Category 2

Label Elements

Signal Word:	Warning
Hazard Statements:	H332 - Harmful if inhaled H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements:	P271 - Use only outdoors or in a well-ventilated area P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P273 - Avoid release to the environment P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P312 - Call a POISON CENTRE/doctor/physician if you feel unwell
	comfortable for breathing P312 - Call a POISON CENTRE/doctor/physician if you feel unwell P391 - Collect spillage P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards Short Term:

Australian Hazard Classification (NOHSC):

Note:

May cause eye irritation . Signs and symptoms might include redness, swelling, blurred vision or pain. May cause slight skin irritation. (based on components) May cause mucous membrane and respiratory tract irritation. Individuals sensitive to this chemical or other materials in its chemical class may develop allergic reactions. Hazardous Substance. Non-Dangerous Goods.

This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Chlorhexidine acetate	56-95-1	200-302-4	Acute Tox. 4 (H302) Acute Tox.2(H330) Eye Irrit.2A (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	2

Additional Information: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

For the full text of the CLP/GHS abbreviations mentioned in this Section, see Section 16

### **4. FIRST AID MEASURES**

Description of First Aid Measures Eye Contact:	If irritation occurs or persists, get medical attention. Flush eyes with water for at least 15 minutes.
Skin Contact:	Remove contaminated clothing and wash exposed area with soap and water. Obtain medical assistance if irritation occurs.
Ingestion:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.
Inhalation:	Remove to fresh air and keep patient at rest. Seek medical attention immediately.
ZT00053	

#### Material Name: Nolvasan Solution Revision date: 13-Aug-2015

Most Important Symptoms and Effe	ects, Both Acute and Delayed		
Symptoms and Effects of Exposure:	For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.		
Medical Conditions Aggravated by Exposure:	None known		
Indication of the Immediate Medica Notes to Physician:	al Attention and Special Treatment Needed None		
	5. FIRE-FIGHTING MEASURES		
Extinguishing Media:	Extinguish fires with CO2, extinguishing powder, foam, or water.		
Special Hazards Arising from the S Hazardous Combustion Products:	Substance or Mixture Formation of toxic gases is possible during heating or fire. May include oxides of carbon nitrogen and products of chlorine.		
Fire / Explosion Hazards:	Fine particles (such as dust and mists) may fuel fires/explosions.		

#### **Advice for Fire-Fighters**

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

#### **Environmental Precautions**

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

#### Methods and Material for Containment and Cleaning Up

Measures for Cleaning /<br/>Collecting:Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill<br/>area thoroughly.

Additional Consideration for<br/>Large Spills:Non-essential personnel should be evacuated from affected area. Report emergency<br/>situations immediately. Clean up operations should only be undertaken by trained personnel.

### 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Use with adequate ventilation. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

#### Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Incompatible Materials: Specific end use(s): Store as directed by product packaging. Acids and bases , As a precautionary measure, keep away from strong oxidizers No data available

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control Parameters**

ZT00053

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### No Occupational Exposure Limit (OEL) or Short Term Exposure Limit (STEL) has been identified.

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

Chlorhexidine acetate Zoetis OEB	OEB 4 (control exposure to the range of 1ug/m <sup>3</sup> to <10ug/m <sup>3</sup> )
Exposure Controls	
Engineering Controls:	Engineering controls should be used as the primary means to control exposures. Keep airborne contamination levels within the OEB range. General room ventilation is adequate unless the process generates dust, mist or fumes.
Personal Protective Equipment:	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
Hands:	Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.
Eyes:	Wear safety glasses or goggles if eye contact is possible.
Skin:	Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.
Respiratory protection:	Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure. If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Odor: Molecular Formula:	Liquid Pleasant Mixture	Color: Odor Threshold: Molecular Weight:	Blue No data available. Mixture
Solvent Solubility: Water Solubility: pH: Melting/Freezing Point (°C): Boiling Point (°C): Partition Coefficient: (Method, pH, E No data available Decomposition Temperature (°C):	No data available Soluble No data available. No data available No data available. indpoint, Value) No data available.		
Evaporation Rate (Gram/s): Vapor Pressure (kPa): Vapor Density (g/ml): Relative Density: Viscosity:	No data available No data available 1.01 No data available No data available		
Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.):		No data available No data available No data available No data available No data available	

### **10. STABILITY AND REACTIVITY**

Reactivity: Chemical Stability: Possibility of Hazardous Reactions Oxidizing Properties: Conditions to Avoid: Incompatible Materials: Hazardous Decomposition Products: No data available Stable under normal conditions of use.

No data available

Fine particles (such as dust and mists) may fuel fires/explosions. Acids and bases, As a precautionary measure, keep away from strong oxidizers Toxic fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride and other chlorine-containing compounds may be emitted.

### **11. TOXICOLOGICAL INFORMATION**

#### Information on Toxicological Effects General Information:

Toxicological properties of the formulation have not been investigated. The information in this section describes the potential hazards of the individual ingredients and the formulation. Routes of exposure: eye contact, skin contact

#### Acute Toxicity: (Species, Route, End Point, Dose)

#### **Chlorhexidine acetate**

 Mouse
 Oral
 LD 50
 2000 mg/kg

 Rat
 Oral
 LD 50
 (F) 1180 / (M) 1710 mg/kg

 Rat
 Inhalation
 LC 50
 0.10 - 0.46 mg/L

 Rabbit
 Dermal
 LD 50
 > 2000 mg/kg

## Acute Toxicity Comments:A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable<br/>at the highest dose used in the test.Inhalation Acute ToxicityMay be harmful if inhaled. May cause respiratory tract and mucous membrane irritation.

Irritation / Sensitization: (Study Type, Species, Severity)

#### **Chlorhexidine acetate**

Skin Irritation Rabbit Mild Eye Irritation Rabbit Severe Skin Sensitization - GPMT Guinea Pig Negative

Irritation / Sensitization Comments:May cause eye irritation based on components.Skin Irritation / SensitizationMay cause mild skin irritation. based on components.

#### Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

#### **Chlorhexidine acetate**

13 Week(s) Rabbit Dermal 500 mg/kg/day LOAEL Liver, Skin

#### Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Chlornexidine acetate					
Embryo / Fetal Development	Rat	Oral	31.25 mg/kg/day	LOEL	Maternal toxicity
Embryo / Fetal Development	Rat	Oral	62.5 mg/kg/day	NOEL	No effects at maximum dose

#### Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

### **11. TOXICOLOGICAL INFORMATION**

#### **Chlorhexidine acetate**

Mammalian Cell MutagenicityMouse LymphomaNegativeIn Vitro CytogeneticsChinese Hamster Ovary (CHO) cellsNegativeIn Vivo MicronucleusRat HepatocyteNegative

**Carcinogen Status:** 

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

#### Product Level Toxicity Data

Inhalation ATE (Acute Toxicity Estimate), calculated Oral ATE (Acute Toxicity Estimate), calculated 5 mg/l (dusts/mists)

>5000 mg/kg

### **12. ECOLOGICAL INFORMATION**

**Environmental Overview:** 

Environmental properties of the formulation have not been investigated. The following information is available for the individual ingredients. Releases to the environment should be avoided.

**Toxicity:** 

### Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

#### Chlorhexidine acetate

*Oncorhynchus mykiss* (Rainbow Trout) NA LC50 96 Hours 1.9 ppm *Lepomis macrochirus* (Bluegill Sunfish) N/A LC50 96 Hours 0.6 ppm *Daphnia Magna* (Water Flea) N/A EC50 N/A 0.06 mg/L

#### Terrestrial Toxicity: (Species, Method, End Point, Duration, Result)

Chlorhexidine acetate Colinus virginianus (Bobwhite Quail)	N/A	LD50	N/A	2013 mg/kg
Persistence and Degradability:	No d	data ava	ilable	
Bio-accumulative Potential:	No d	data ava	ilable	
Mobility in Soil:	No d	data ava	ilable	

### **13. DISPOSAL CONSIDERATIONS**

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

### **14. TRANSPORT INFORMATION**

As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Liters or less for liquids or having a net mass per single or inner packaging of 5 kilograms or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375.

UN number:	UN 3082
UN proper shipping name:	Environmentally hazardous substances, liquid, n.o.s. (chlorhexidine acetate)
Transport hazard class(es):	9
Packing group:	III
Environmental Hazard(s):	Marine Pollutant

Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

### DOT / ANTT: Not regulated for transportation

### **15. REGULATORY INFORMATION**

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada - WHMIS: Classifications WHMIS hazard class: Non-controlled This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

#### **Chlorhexidine acetate**

### **15. REGULATORY INFORMATION**

CERCLA/SARA 313 Emission reporting California Proposition 65 Australia (AICS): EU EINECS/ELINCS List Not Listed Not Listed Present 200-302-4

### **16. OTHER INFORMATION**

### Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Acute toxicity, inhalation-Cat.2; H330 - Fatal if inhaled Serious eye damage/eye irritation-Cat.2A; H319 - Causes serious eye irritation Hazardous to the aquatic environment, acute toxicity-Cat.1; H400 - Very toxic to aquatic life Hazardous to the aquatic environment, chronic toxicity-Cat.1; H410 - Very toxic to aquatic life with long lasting effects

Data Sources:	The data contained in this SDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.
Reasons for Revision:	Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 11 - Toxicology Information. Updated Section 14 - Transport Information.

Prepared by: Toxicology and Hazard Communication Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet



Revision date: 13-Aug-2015

Version: 2.7

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

**Product Identifier** 

Material Name: Nolvasan Solution

Trade Name:	
Chemical Family:	
Registration Number:	

NOLVASAN® Mixture EPA Reg. No. 1007-99

 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

 Intended Use:
 Veterinary product used as disinfectant

 Restrictions on Use:
 Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.Zoet100 Campus Drive, P.O. Box 651MerFlorham Park, New Jersey 07932 (USA)193Rocky Mountain Poison and Drug Center Phone: 1-866-531-8896BelProduct Support/Technical Services Phone: 1-800-366-5288

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: VMIPSrecords@zoetis.com Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem Belgium

Emergency telephone number: International CHEMTREC (24 hours): +1-703-527-3887

### 2. HAZARDS IDENTIFICATION

Appearance:

Clear blue liquid

#### Classification of the Substance or Mixture GHS - Classification

Acute Toxicity - Dusts and Mists: Category 4 Acute aquatic toxicity: Category 2 Chronic aquatic toxicity: Category 2

Label Elements

Signal Word:	Warning
Hazard Statements:	H332 - Harmful if inhaled H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements:	P271 - Use only outdoors or in a well-ventilated area P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P273 - Avoid release to the environment P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P312 - Call a POISON CENTRE/doctor/physician if you feel unwell
	comfortable for breathing P312 - Call a POISON CENTRE/doctor/physician if you feel unwell P391 - Collect spillage P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards Short Term:

Australian Hazard Classification (NOHSC):

Note:

May cause eye irritation . Signs and symptoms might include redness, swelling, blurred vision or pain. May cause slight skin irritation. (based on components) May cause mucous membrane and respiratory tract irritation. Individuals sensitive to this chemical or other materials in its chemical class may develop allergic reactions. Hazardous Substance. Non-Dangerous Goods.

This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Chlorhexidine acetate	56-95-1	200-302-4	Acute Tox. 4 (H302) Acute Tox.2(H330) Eye Irrit.2A (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	2

Additional Information: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

For the full text of the CLP/GHS abbreviations mentioned in this Section, see Section 16

### **4. FIRST AID MEASURES**

Description of First Aid Measures Eye Contact:	If irritation occurs or persists, get medical attention. Flush eyes with water for at least 15 minutes.
Skin Contact:	Remove contaminated clothing and wash exposed area with soap and water. Obtain medical assistance if irritation occurs.
Ingestion:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.
Inhalation:	Remove to fresh air and keep patient at rest. Seek medical attention immediately.
ZT00053	

#### Material Name: Nolvasan Solution Revision date: 13-Aug-2015

Most Important Symptoms and Effe	ects, Both Acute and Delayed			
Symptoms and Effects of Exposure:	For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.			
Medical Conditions None known Aggravated by Exposure:				
Indication of the Immediate Medica Notes to Physician:	al Attention and Special Treatment Needed None			
	5. FIRE-FIGHTING MEASURES			
Extinguishing Media:	Extinguish fires with CO2, extinguishing powder, foam, or water.			
Special Hazards Arising from the S Hazardous Combustion Products:	Substance or Mixture Formation of toxic gases is possible during heating or fire. May include oxides of carbon nitrogen and products of chlorine.			
Fire / Explosion Hazards:	Fine particles (such as dust and mists) may fuel fires/explosions.			

#### **Advice for Fire-Fighters**

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

#### **Environmental Precautions**

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

#### Methods and Material for Containment and Cleaning Up

Measures for Cleaning /<br/>Collecting:Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill<br/>area thoroughly.

Additional Consideration for<br/>Large Spills:Non-essential personnel should be evacuated from affected area. Report emergency<br/>situations immediately. Clean up operations should only be undertaken by trained personnel.

### 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Use with adequate ventilation. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

#### Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Incompatible Materials: Specific end use(s): Store as directed by product packaging. Acids and bases , As a precautionary measure, keep away from strong oxidizers No data available

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control Parameters**

ZT00053

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### No Occupational Exposure Limit (OEL) or Short Term Exposure Limit (STEL) has been identified.

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

Chlorhexidine acetate Zoetis OEB	OEB 4 (control exposure to the range of 1ug/m <sup>3</sup> to <10ug/m <sup>3</sup> )
Exposure Controls	
Engineering Controls:	Engineering controls should be used as the primary means to control exposures. Keep airborne contamination levels within the OEB range. General room ventilation is adequate unless the process generates dust, mist or fumes.
Personal Protective Equipment:	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
Hands:	Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.
Eyes:	Wear safety glasses or goggles if eye contact is possible.
Skin:	Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.
Respiratory protection:	Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure. If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Odor: Molecular Formula:	Liquid Pleasant Mixture	Color: Odor Threshold: Molecular Weight:	Blue No data available. Mixture
Solvent Solubility: Water Solubility: pH: Melting/Freezing Point (°C): Boiling Point (°C): Partition Coefficient: (Method, pH, E No data available Decomposition Temperature (°C):	No data available Soluble No data available. No data available No data available. indpoint, Value) No data available.		
Evaporation Rate (Gram/s): Vapor Pressure (kPa): Vapor Density (g/ml): Relative Density: Viscosity:	No data available No data available 1.01 No data available No data available		
Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.):		No data available No data available No data available No data available No data available	

### **10. STABILITY AND REACTIVITY**

Reactivity: Chemical Stability: Possibility of Hazardous Reactions Oxidizing Properties: Conditions to Avoid: Incompatible Materials: Hazardous Decomposition Products: No data available Stable under normal conditions of use.

No data available

Fine particles (such as dust and mists) may fuel fires/explosions. Acids and bases, As a precautionary measure, keep away from strong oxidizers Toxic fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride and other chlorine-containing compounds may be emitted.

### **11. TOXICOLOGICAL INFORMATION**

#### Information on Toxicological Effects General Information:

Toxicological properties of the formulation have not been investigated. The information in this section describes the potential hazards of the individual ingredients and the formulation. Routes of exposure: eye contact, skin contact

#### Acute Toxicity: (Species, Route, End Point, Dose)

#### **Chlorhexidine acetate**

 Mouse
 Oral
 LD 50
 2000 mg/kg

 Rat
 Oral
 LD 50
 (F) 1180 / (M) 1710 mg/kg

 Rat
 Inhalation
 LC 50
 0.10 - 0.46 mg/L

 Rabbit
 Dermal
 LD 50
 > 2000 mg/kg

## Acute Toxicity Comments:A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable<br/>at the highest dose used in the test.Inhalation Acute ToxicityMay be harmful if inhaled. May cause respiratory tract and mucous membrane irritation.

Irritation / Sensitization: (Study Type, Species, Severity)

#### **Chlorhexidine acetate**

Skin Irritation Rabbit Mild Eye Irritation Rabbit Severe Skin Sensitization - GPMT Guinea Pig Negative

Irritation / Sensitization Comments:May cause eye irritation based on components.Skin Irritation / SensitizationMay cause mild skin irritation. based on components.

#### Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

#### **Chlorhexidine acetate**

13 Week(s) Rabbit Dermal 500 mg/kg/day LOAEL Liver, Skin

#### Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Chlornexidine acetate					
Embryo / Fetal Development	Rat	Oral	31.25 mg/kg/day	LOEL	Maternal toxicity
Embryo / Fetal Development	Rat	Oral	62.5 mg/kg/day	NOEL	No effects at maximum dose

#### Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

### **11. TOXICOLOGICAL INFORMATION**

#### **Chlorhexidine acetate**

Mammalian Cell MutagenicityMouse LymphomaNegativeIn Vitro CytogeneticsChinese Hamster Ovary (CHO) cellsNegativeIn Vivo MicronucleusRat HepatocyteNegative

**Carcinogen Status:** 

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

#### Product Level Toxicity Data

Inhalation ATE (Acute Toxicity Estimate), calculated Oral ATE (Acute Toxicity Estimate), calculated 5 mg/l (dusts/mists)

>5000 mg/kg

### **12. ECOLOGICAL INFORMATION**

**Environmental Overview:** 

Environmental properties of the formulation have not been investigated. The following information is available for the individual ingredients. Releases to the environment should be avoided.

**Toxicity:** 

### Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

#### Chlorhexidine acetate

*Oncorhynchus mykiss* (Rainbow Trout) NA LC50 96 Hours 1.9 ppm *Lepomis macrochirus* (Bluegill Sunfish) N/A LC50 96 Hours 0.6 ppm *Daphnia Magna* (Water Flea) N/A EC50 N/A 0.06 mg/L

#### Terrestrial Toxicity: (Species, Method, End Point, Duration, Result)

Chlorhexidine acetate Colinus virginianus (Bobwhite Quail)	N/A	LD50	N/A	2013 mg/kg
Persistence and Degradability:	No d	data ava	ilable	
Bio-accumulative Potential:	No d	data ava	ilable	
Mobility in Soil:	No d	data ava	ilable	

### **13. DISPOSAL CONSIDERATIONS**

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

### **14. TRANSPORT INFORMATION**

As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Liters or less for liquids or having a net mass per single or inner packaging of 5 kilograms or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375.

UN number:	UN 3082
UN proper shipping name:	Environmentally hazardous substances, liquid, n.o.s. (chlorhexidine acetate)
Transport hazard class(es):	9
Packing group:	III
Environmental Hazard(s):	Marine Pollutant

Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

### DOT / ANTT: Not regulated for transportation

### **15. REGULATORY INFORMATION**

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada - WHMIS: Classifications WHMIS hazard class: Non-controlled This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

#### **Chlorhexidine acetate**

### **15. REGULATORY INFORMATION**

CERCLA/SARA 313 Emission reporting California Proposition 65 Australia (AICS): EU EINECS/ELINCS List Not Listed Not Listed Present 200-302-4

### **16. OTHER INFORMATION**

#### Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Acute toxicity, inhalation-Cat.2; H330 - Fatal if inhaled Serious eye damage/eye irritation-Cat.2A; H319 - Causes serious eye irritation Hazardous to the aquatic environment, acute toxicity-Cat.1; H400 - Very toxic to aquatic life Hazardous to the aquatic environment, chronic toxicity-Cat.1; H410 - Very toxic to aquatic life with long lasting effects

Data Sources:	The data contained in this SDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.
Reasons for Revision:	Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 11 - Toxicology Information. Updated Section 14 - Transport Information.

Prepared by: Toxicology and Hazard Communication Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet