



Version 5.0	Revision Date: 06.09.2024	SDS N 108399	umber: 972-00008	Date of last issue: 06.04.2024 Date of first issue: 25.08.2022
SECTION	N 1: Identification of	the sub	stance/mix	ture and of the company/undertaking
1.1 Produ	ıct identifier			
Trade	e name	: Chl	orhexidine (4	.79%) Formulation
Othe	r means of identification	: Hib	itane (A0005	85)
1.2 Relev	ant identified uses of t	he subst	tance or mix	ture and uses advised against
Use	of the Sub- ce/Mixture		erinary prod	_
Reco on us	ommended restrictions se	: Not	applicable	
1.3 Detail	s of the supplier of the	safety c	lata sheet	
Com	pany		D Spartan Roa 9 Spartan, \$	
Telep	bhone	: +27	119239300	
	ail address of person onsible for the SDS	: EH	SDATASTEV	VARD@msd.com
	<b>gency telephone numb</b> 08-423-6000	er		
SECTION	N 2: Hazards identific	ation		
2.1 Class	ification of the substar	nce or m	ixture	
Class	sification (REGULATIO	N (EC) N	lo 1272/2008	3)
	rritation, Category 2 -term (chronic) aquatic h y 2	nazard, C		: Causes serious eye irritation. : Toxic to aquatic life with long lasting effects.
2.2 Label	elements			
Labe	elling (REGULATION (E	C) No 12	272/2008)	
Haza	rd pictograms		<u>}</u>	¥
Signa	al word	: War	ning	▼
Haza	ard statements	: H319 H41		erious eye irritation. aquatic life with long lasting effects.





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Preca	utionary statements	: <b>Prevention:</b> P264 Wash ski	n thoroughly after handling.
			ease to the environment. e protection/ face protection.
		Response:	
		P337 + P313 If attention. P391 Collect sp	eye irritation persists: Get medical advice/ pillage.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Chlorhexidine	55-56-1 200-238-7	Acute Tox. 4; H302 Eye Irrit. 2; H319 STOT RE 2; H373 (Liver) Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 2,5 - < 10
		M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	
Nonylphenol, ethoxylated	9016-45-9	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute	>= 1 - < 2,5
		aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 10	

For explanation of abbreviations see section 16.



SECTION 4: First aid measures         4.1 Description of first aid measures         General advice       In the case of accident or if you feel unwell, seek medical arvice immediately. When symptoms persist or in all cases of doubt seek medica advice.         Protection of first-aiders       First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).         If inhaled       If inhaled, remove to fresh air. Get medical attention if symptoms occur.         In case of skin contact       In case of contact, immediately flush skin with soap and ple of water. Get medical attention if symptoms occur.         In case of eye contact       In case of contact, immediately flush sees with plenty of wa for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.         If swallowed       If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.         4.2 Most important symptoms and effects, both acute and delayed Risks       Causes serious eye irritation.         4.3 Indication of any immediate medical attention and special treatment needed Treatment       Treat symptomatically and supportively.         SECTION 5: Firefighting measures       Unsuitable extinguishing media       Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical         Unsuitable extinguishing       None known. media       None known.         6.2 Special hazards arising from the substance or mixtu	Version 5.0	Revision Date: 06.09.2024	-	OS Number: 839972-00008	Date of last issue: 06.04.2024 Date of first issue: 25.08.2022
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<ul> <li>vice immediately. When symptoms persist or in all cases of doubt seek medic advice.</li> <li>Protection of first-aiders</li> <li>First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).</li> <li>If inhaled</li> <li>If inhaled, remove to fresh air. Get medical attention if symptoms occur.</li> <li>In case of skin contact</li> <li>In case of contact, immediately flush skin with soap and ple of water. Get medical attention if symptoms occur.</li> <li>In case of eye contact</li> <li>In case of contact, immediately flush eyes with plenty of wa for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.</li> <li>If swallowed</li> <li>If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.</li> <li>4.2 Most important symptoms and effects, both acute and delayed Risks</li> <li>Causes serious eye irritation.</li> <li>4.3 Indication of any immediate medical attention and special treatment needed Treatment</li> <li>Treat symptomatically and supportively.</li> <li>SECTION 5: Firefighting measures</li> <li>5.1 Extinguishing media</li> <li>Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical</li> <li>Unsuitable extinguishing media</li> <li>None known. media</li> <li>5.2 Special hazards arising from the substance or mixture Specific hazards during fire- ighting</li> </ul>	4.1 Descr	iption of first aid meas	ure	S	
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Get medical attention if symptoms occur.         In case of skin contact       :       In case of contact, immediately flush skin with soap and ple of water. Get medical attention if symptoms occur.         In case of eye contact       :       In case of contact, immediately flush eyes with plenty of wa for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.         If swallowed       :       If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.         4.2 Most important symptoms and effects, both acute and delayed Risks       :       Causes serious eye irritation.         4.3 Indication of any immediate medical attention and special treatment needed Treatment       :       Treat symptomatically and supportively.         SECTION 5: Firefighting measures       5.1 Extinguishing media       :       Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical         Unsuitable extinguishing media       :       None known.       Section diaxide in the substance or mixture         5.2 Special hazards arising from the substance or mixture fighting       :       Exposure to combustion products may be a hazard to healt	Prote	ction of first-aiders	:	and use the reco	ommended personal protective equipment
of water.       Get medical attention if symptoms occur.         In case of eye contact       In case of contact, immediately flush eyes with plenty of wa for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.         If swallowed       If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.         4.2 Most important symptoms and effects, both acute and delayed Risks       Causes serious eye irritation.         4.3 Indication of any immediate medical attention and special treatment needed Treatment       Treat symptomatically and supportively.         SECTION 5: Firefighting measures       Statistic (CO2) Dry chemical         Unsuitable extinguishing media       Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical         Unsuitable extinguishing       None known.         media       None known.         5.2 Special hazards arising from the substance or mixture Specific hazards during fire- fighting       Exposure to combustion products may be a hazard to healt fighting	lf inha	aled	:		
for at least 15 minutes.         If easy to do, remove contact lens, if worn.         Get medical attention.         If swallowed       : If swallowed, DO NOT induce vomiting.         Get medical attention if symptoms occur.         Rinse mouth thoroughly with water.         4.2 Most important symptoms and effects, both acute and delayed         Risks       : Causes serious eye irritation.         4.3 Indication of any immediate medical attention and special treatment needed         Treatment       : Treat symptomatically and supportively.         SECTION 5: Firefighting measures         5.1 Extinguishing media         Suitable extinguishing media         Water spray         Alcohol-resistant foam         Carbon dioxide (CO2)         Dry chemical         Unsuitable extinguishing         :       None known.         media         5.2 Special hazards arising from the substance or mixture         Specific hazards during fire-       : Exposure to combustion products may be a hazard to healt fighting	In cas	se of skin contact	:	of water.	
Get medical attention if symptoms occur. Rinse mouth thoroughly with water.         4.2 Most important symptoms and effects, both acute and delayed Risks         Risks       : Causes serious eye irritation.         4.3 Indication of any immediate medical attention and special treatment needed Treatment       : Treat symptomatically and supportively.         SECTION 5: Firefighting measures         5.1 Extinguishing media Suitable extinguishing media       : Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical         Unsuitable extinguishing media       : None known.         5.2 Special hazards arising from the substance or mixture Specific hazards during fire- ifghting       : Exposure to combustion products may be a hazard to healt	In cas	se of eye contact	:	for at least 15 m If easy to do, rer	inutes. move contact lens, if worn.
Risks       : Causes serious eye irritation.         4.3 Indication of any immediate medical attention and special treatment needed Treatment       : Treat symptomatically and supportively.         SECTION 5: Firefighting measures       : Treat symptomatically and supportively.         SECTION 5: Firefighting measures       : Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical         Unsuitable extinguishing media       : None known.         5.2 Special hazards arising from the substance or mixture Specific hazards during fire- fighting       : Exposure to combustion products may be a hazard to healt	lf swa	allowed	:	Get medical atte	ention if symptoms occur.
<ul> <li>4.3 Indication of any immediate medical attention and special treatment needed Treatment : Treat symptomatically and supportively.</li> <li>SECTION 5: Firefighting measures</li> <li>5.1 Extinguishing media Suitable extinguishing media : Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical</li> <li>Unsuitable extinguishing : None known. media</li> <li>5.2 Special hazards arising from the substance or mixture Specific hazards during fire- fighting</li> <li>Exposure to combustion products may be a hazard to healt fighting</li> </ul>	4.2 Most i	mportant symptoms a	nd e	effects, both acu	te and delayed
Treatment       : Treat symptomatically and supportively.         SECTION 5: Firefighting measures         5.1 Extinguishing media         Suitable extinguishing media         Suitable extinguishing media         Water spray         Alcohol-resistant foam         Carbon dioxide (CO2)         Dry chemical         Unsuitable extinguishing       : None known.         media         5.2 Special hazards arising from the substance or mixture         Specific hazards during fire-       : Exposure to combustion products may be a hazard to healt	Risks	i	:	Causes serious	eye irritation.
SECTION 5: Firefighting measures         5.1 Extinguishing media         Suitable extinguishing media         Suitable extinguishing media         Suitable extinguishing media         Suitable extinguishing media         Unsuitable extinguishing         Insuitable extinguishing         Section dioxide (CO2)         Dry chemical         Unsuitable extinguishing         Special hazards arising from the substance or mixture         Specific hazards during fire-	4.3 Indica	tion of any immediate	mee	dical attention ar	nd special treatment needed
<ul> <li>5.1 Extinguishing media <ul> <li>Suitable extinguishing media</li> <li>Water spray <ul> <li>Alcohol-resistant foam</li> <li>Carbon dioxide (CO2)</li> <li>Dry chemical</li> </ul> </li> <li>Unsuitable extinguishing <ul> <li>None known.</li> </ul> </li> <li>5.2 Special hazards arising from the substance or mixture</li> <li>Specific hazards during fire- <ul> <li>Exposure to combustion products may be a hazard to healt fighting</li> </ul> </li> </ul></li></ul>	Treat	ment	:	Treat symptoma	tically and supportively.
Suitable extinguishing media       :       Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical         Unsuitable extinguishing media       :       None known.         5.2 Special hazards arising from the substance or mixture Specific hazards during fire- fighting       :       Exposure to combustion products may be a hazard to healt	SECTION	N 5: Firefighting mea	sur	es	
Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical 5.2 Special hazards arising from the substance or mixture Specific hazards during fire- : Exposure to combustion products may be a hazard to healt fighting	5.1 Exting	uishing media			
media 5.2 Special hazards arising from the substance or mixture Specific hazards during fire- : Exposure to combustion products may be a hazard to healt fighting	Suita	ble extinguishing media	:	Alcohol-resistan Carbon dioxide	
Specific hazards during fire- : Exposure to combustion products may be a hazard to healt fighting			:	None known.	
Specific hazards during fire- : Exposure to combustion products may be a hazard to healt fighting	5.2 Specia	al hazards arising from	n the	e substance or m	nixture
Hazardous combustion prod- : Carbon oxides			:	Exposure to con	nbustion products may be a hazard to health.
	Haza	rdous combustion prod-	:	Carbon oxides	



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ucts				
5.3 Advice	e for firefighters			
•	al protective equipment efighters	:		re, wear self-contained breathing apparatus. otective equipment.
Speci <sup>;</sup> ods	fic extinguishing meth-	:	cumstances and Use water spray	g measures that are appropriate to local cir- the surrounding environment. to cool unopened containers. aged containers from fire area if it is safe to do

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).
6.2 Environmental precautions		
Environmental precautions	:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up with inert absorbent material. For large spills, provide dyking or other appropriate contain- ment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor- bent.	
	Local or national regulations may apply to releases and dis- posal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter- mine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.	

## 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

## **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

**Technical measures** 

: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.





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Local/Total ventilation Advice on safe handling Hygiene measures			Use only with adequate ventilation. Do not breathe mist or vapours. Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as- sessment Take care to prevent spills, waste and minimize release to the environment. If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contami- nated clothing before re-use. The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the		
7.2 Cone	litions for safe storage,	inc	luding any incom	patibilities	
	uirements for storage as and containers	:	Keep in properly the particular nati	labelled containers. Store in accordance with onal regulations.	
Adv	ice on common storage	:	Do not store with Strong oxidizing a Gases	the following product types: agents	
7.3 Spec	ific end use(s)				
-	cific use(s)	:	No data available		

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis			
Chlorhexidine	55-56-1	TWA	40 µg/m3 (OEB 3)	Internal			
	Further inform	Further information: RSEN, DSEN					
		Wipe limit	100 µg/100 cm2	Internal			

#### 8.2 Exposure controls

#### Engineering measures

Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.



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an vic				mpounds are required to control at source rolled areas (e.g., open-face containment de-
Pe	rsonal protective equipn	nent		
Ey	/e/face protection	:	If the work enviro mists or aerosols Wear a faceshield	ses with side shields or goggles. nment or activity involves dusty conditions, , wear the appropriate goggles. d or other full face protection if there is a t contact to the face with dusts, mists, or
Ha	and protection			
	Material	:	Chemical-resistar	at gloves
Sk	Remarks in and body protection	:	being performed ( suits) to avoid exp	aboratory coat. arments should be used based upon the task e.g., sleevelets, apron, gauntlets, disposable bosed skin surfaces. legowning techniques to remove potentially
Re	spiratory protection	:	If adequate local of sure assessment	exhaust ventilation is not available or expo- demonstrates exposures outside the rec- lines, use respiratory protection.
	Filter type	:	Particulates type	

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Appearance Colour Odour Odour Threshold	:	Aqueous solution blue No data available No data available
рН	:	5,55 - 6,65 (20 °C)
Melting point/freezing point	:	No data available
Initial boiling point and boiling	:	No data available
range Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available



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Relati	ve vapour density	: No data available	
Relati	ve density	: 1,010 - 1,020	
Densi	ty	: No data available	
Wa Partiti octan Auto- Decon Visco Visco	ility(ies) ater solubility on coefficient: n- ol/water ignition temperature mposition temperature sity scosity, kinematic sive properties	<ul> <li>No data available</li> <li>Not applicable</li> <li>No data available</li> <li>No data available</li> <li>No data available</li> <li>No tata available</li> <li>Not explosive</li> </ul>	
Oxidiz	zing properties	: The substance or mixture is not classified as oxidizing.	
<b>9.2 Other</b> Flamr Molec	<b>information</b> nability (liquids) cular weight le size	<ul> <li>No data available</li> <li>No data available</li> <li>Not applicable</li> </ul>	

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Not classified as a reactivity hazard.

## 10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions					
Hazardous reactions	:	Can react with strong oxidizing agents.			
10.4 Conditions to sucid					

## 10.4 Conditions to avoid

Conditions to avoid : None known.

## 10.5 Incompatible materials

Materials to avoid : Oxidizing agents

## **10.6 Hazardous decomposition products**

No hazardous decomposition products are known.





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ECTION	11: Toxicological in	for	mation	
1 1 Inform	nation on toxicologica	d of	lacts	
	nation on likely routes of			
	e <b>toxicity</b> assified based on availa	ble		
Produ				
	oral toxicity	:	Acute toxicity esti Method: Calculati	mate: > 2.000 mg/kg on method
<u>Comp</u>	oonents:			
Chlor	hexidine:			
Acute	oral toxicity	:	LD50 Oral (Mouse	e): 1.260 mg/kg
			LD50 Oral (Rabbi	t): 1.100 mg/kg
			LD50 Oral (Rat): 2	2.000 mg/kg
	toxicity (other routes of istration)	:	LD50 (Rat): 21 mg Application Route	
II Nonvi	lphenol, ethoxylated:			
	oral toxicity	:	LD50 (Rat): 500 -	2.000 mg/kg
Skin o	corrosion/irritation			
	assified based on availa	ble	information.	
<u>Comp</u>	oonents:			
	Iphenol, ethoxylated:		5.1.1	
Specie Metho		÷	Rabbit OECD Test Guide	eline 404
Resul	t	:	No skin irritation	
	us eye damage/eye irri	itati	on	
	es serious eye irritation.			
<u>Comp</u>	oonents:			
	hexidine:			
Specie Resul		:	Rabbit Mild eye irritation	
Nonv	Iphenol, ethoxylated:			
Speci	es	:	Rabbit	
Metho	bd	:	OECD Test Guide	eline 405





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R	esult	:	Irreversible effec	ts on the eye				
R	espiratory or skin sensi	tisatio	on					
_	Skin sensitisation Not classified based on available information.							
R	Respiratory sensitisation							
	ot classified based on ava omponents:	ailable	information.					
	onylphenol, ethoxylated	I:						
Te Ex SI R	est Type xposure routes becies esult emarks		Maximisation Tes Skin contact Guinea pig negative Based on data fr	st om similar materials				
	erm cell mutagenicity ot classified based on ava	ailable	information.					
<u>C</u> (	omponents:							
C	hlorhexidine:							
G	enotoxicity in vitro	:	Test Type: Bacte Result: negative	rial reverse mutation assay (AMES)				
				nosomal aberration nese hamster ovary cells				
G	enotoxicity in vivo	:	Test Type: domir Species: Mouse Result: negative	nant lethal test				
			Test Type: Cytog Species: Hamste Result: negative					
N	onylphenol, ethoxylated	l:						
	enotoxicity in vitro	:	Result: negative	erial reverse mutation assay (AMES) on data from similar materials				
	arcinogenicity ot classified based on ava	ailable	information.					
<u>C</u> (	omponents:							
C	hlorhexidine:							
A	pecies oplication Route xposure time	:	Rat oral (drinking wa 2 Years	ter)				



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Frequ NOAE Resu		: daily : 38 mg/kg body weight : negative	
Expos Frequ NOAE Resul	cation Route sure time Jency of Treatment EL	<ul> <li>Rat</li> <li>oral (drinking water)</li> <li>2 Years</li> <li>daily</li> <li>158 mg/kg body weight</li> <li>negative</li> </ul>	
	rhexidine:		
Effect	ts on fertility	: Species: Rat Fertility: NOAEL: 100 mg/kg body weight	
Effect ment	ts on foetal develop-	: Species: Rat Developmental Toxicity: NOAEL: 300 mg/kg body weight	
		Species: Rabbit Developmental Toxicity: NOAEL: 40 mg/kg body weight	
STOT	- single exposure		

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

## **Components:**

## **Chlorhexidine:**

Target Organs Assessment	: Liver	
Assessment	: May cause damage to organs through prolonged or rep	eated
	exposure.	

## **Repeated dose toxicity**

### **Components:**

## Chlorhexidine:

Species	: Rat
NOAEL	: 158 mg/kg
Application Route	: Oral
Exposure time	: 2 yr
Species	: Rabbit
LOAEL	: 250 mg/kg
Application Route	: Dermal
Exposure time	: 13 Weeks
Target Organs	: Skin, Liver



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Not c	r <b>ation toxicity</b> lassified based on ava <b>rience with human e</b>			
Com	ponents:			
Chlo	rhexidine:			
Gene Inhala Inges		:	in the chest, up Target Organs:	

## **SECTION 12: Ecological information**

## 12.1 Toxicity

### **Components:**

Chlorhexidine:		
Toxicity to fish	:	(Fish): 2,088 mg/l Exposure time: 96 h Method: ECOSAR (Ecological Structure Activity Relation- ships)
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,222 mg/l Exposure time: 48 h Method: ECOSAR (Ecological Structure Activity Relation- ships)
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 1,124 mg/l End point: Growth rate Exposure time: 96 hrs Method: ECOSAR (Ecological Structure Activity Relation- ships)
M-Factor (Acute aquatic tox- icity)	:	1
M-Factor (Chronic aquatic toxicity)	:	1
Nonylphenol, ethoxylated:		
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 0,1 - 1 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (water flea)): > 0,1 - 1 mg/l Exposure time: 48 h Remarks: Based on data from similar materials



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	Toxicit plants	y to algae/aquatic	:	mg/l Exposure time: 72 Method: OECD T Remarks: Based EC10 (Selenastru	est Guideline 201 on data from similar materials ım capricornutum (green algae)): > 1 mg/l
				Exposure time: 72 Method: OECD T Remarks: Based	
	M-Fact icity)	or (Acute aquatic tox-	:	1	
	Toxicity)	y to fish (Chronic tox-	:		
		y to daphnia and other invertebrates (Chron- ity)	:	Exposure time: 28 Species: Mysidop	
	M-Fact toxicity	or (Chronic aquatic )	:	10	
12.2	2 Persis	tence and degradabil	ity		
	<u>Comp</u>	onents:			
_		exidine:			
	Biodeg	radability	:	Remarks: Not inh	erently biodegradable.
		<b>bhenol, ethoxylated:</b> radability	:	Result: Not readil Remarks: Based	y biodegradable. on data from similar materials
12.3	3 Bioaco	cumulative potential			
	Comp	onents:			
		<b>exidine:</b> n coefficient: n- l/water	:	log Pow: 4,85	
	Nonyl	ohenol, ethoxylated:			
	Partitio octano	n coefficient: n- I/water	:	log Pow: 4,48	
12.4		<b>ty in soil</b> a available			



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12.5 Resu	llts of PBT and vPvB a	asse	essment	
<u>Prod</u>	uct:			
Asse	ssment	:	to be either persi	nixture contains no components considered stent, bioaccumulative and toxic (PBT), or nd very bioaccumulative (vPvB) at levels of
12.6 Othe	r adverse effects			
Prod	uct:			
Endo tial	crine disrupting poten-	:	have endocrine c ing to REACH Ar	nixture contains components considered to lisrupting properties for environment, accord- ticle 57(f), Commission Regulation (EU) mission Delegated Regulation (EU)
<u>Com</u>	ponents:			
	Iphenol, ethoxylated: crine disrupting poten-	:		considered to have endocrine disrupting ling to REACH Article 57(f) for the environ-

## **SECTION 13:** Disposal considerations

13.1 Waste treatment methods	
Product	<ul> <li>Dispose of in accordance with local regulations.</li> <li>According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.</li> <li>Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.</li> <li>Do not dispose of waste into sewer.</li> </ul>
Contaminated packaging	<ul> <li>Empty containers should be taken to an approved waste han- dling site for recycling or disposal.</li> <li>If not otherwise specified: Dispose of as unused product.</li> </ul>

## **SECTION 14: Transport information**

14.1 UN number		
ADN	:	UN 3082
ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
ΙΑΤΑ	:	UN 3082

## 14.2 UN proper shipping name

|--|

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.



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		(Chlorhexidine, Nonylphenol, ethoxylated)	
ADF	R	ENVIRONMENTALLY HAZARDOUS SUBS N.O.S. (Chlorhexidine, Nonylphenol, ethoxylated)	TANCE, LIQUID,
RID		ENVIRONMENTALLY HAZARDOUS SUBS N.O.S. (Chlorhexidine, Nonylphenol, ethoxylated)	TANCE, LIQUID,
IMD	G	ENVIRONMENTALLY HAZARDOUS SUBS N.O.S. (Chlorhexidine, Nonylphenol, ethoxylated)	TANCE, LIQUID,
ΙΑΤ	<b>A</b>	Environmentally hazardous substance, liqui (Chlorhexidine, Nonylphenol, ethoxylated)	d, n.o.s.
14.3 Trai	nsport hazard class(es)		
		Class Subsidiary risks	
ADN	1	9	
ADF	R	9	
RID		9	
IMD	G	9	
ΙΑΤ	A	9	
14.4 Pac	king group		
Clas	king group sification Code ard Identification Number	III M6 90 9	
Clas Haza Labe	king group sification Code ard Identification Number	III M6 90 9 (-)	
<b>RID</b> Pacl Clas	king group sification Code ard Identification Number	III M6 90 9	
<b>IMD</b> Pacl Labe	<b>G</b> king group	III 9 F-A, S-F	
Pacl aircr Pacl	king instruction (LQ) king group	964 Y964 III Miscellaneous	



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<b>IATA (Passenger)</b> Packing instruction (pas ger aircraft) Packing instruction (LQ) Packing group Labels		:	964 Y964 III Miscellaneous	
14.5 Environmental hazards				
<b>ADN</b> Environmentally hazardo	us	:	yes	
<b>ADR</b> Environmentally hazardo	us	:	yes	
<b>RID</b> Environmentally hazardo	US	:	yes	
<b>IMDG</b> Marine pollutant		:	yes	
IATA (Passenger) Environmentally hazardo	US	:	yes	
IATA (Cargo) Environmentally hazardo	us	:	yes	

### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

: Not applicable for product as supplied.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Remarks
- SECTION 15: Regulatory information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### The components of this product are reported in the following inventories:

AICS	:	not determined
DSL	:	not determined
IECSC	:	not determined

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

Other information

: Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.



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Full te H302 H318 H319 H373 H400 H410	ext of H-Statements	exposure. Very toxic to aqu	eye damage. eye irritation. age to organs through prolonged or repeated
Acute Aquat	ic Acute ic Chronic am. rit.	<ul> <li>Acute toxicity</li> <li>Short-term (acut</li> <li>Long-term (chro</li> <li>Serious eye dan</li> <li>Eye irritation</li> </ul>	e) aquatic hazard nic) aquatic hazard nage rgan toxicity - repeated exposure
Water Road; ing of tion (E of the Europ associ	ways; ADR - Agreem AIIC - Australian Inve Materials; bw - Body v C) No 1272/2008; CM German Institute for S ean Chemicals Agenc iated with x% response	concerning the Internation ent concerning the In- ntory of Industrial Che veight; CLP - Classific IR - Carcinogen, Muta Standardisation; DSL - y; EC-Number - Europ e; ELx - Loading rate a	ational Carriage of Dangerous Goods by Inland ternational Carriage of Dangerous Goods by micals; ASTM - American Society for the Test- ation Labelling Packaging Regulation; Regula- gen or Reproductive Toxicant; DIN - Standard Domestic Substances List (Canada); ECHA - bean Community number; ECx - Concentration associated with x% response; EmS - Emergen- Substances (Japan); ErCx - Concentration as-

cy Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Sources of key data used to : compile the Safety Data

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-



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Sheet	Sheet cy, http://echa.europa.eu/				
Classification of the mixture:			Classification procedure:		
Eye Iri	rit. 2	H319	Calculation method		
Aquati	c Chronic 2	H411	Calculation method		

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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