



# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

## De-Zal E

Creation date 09th October 2020  
Revision date Version 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**  
Substance / mixture De-Zal E  
mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Mixture's intended use Product for disinfecting hands. Permit No. 2510/TP/2020.  
Mixture uses advised against The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**  
**Manufacturer**  
Name or trade name TENZI Sp. z o.o.  
Address Skarbimierzyce 20, Dołuje, 72-002  
Poland  
VAT Reg No PL8512583405  
Phone +48 91 3119777  
E-mail info@tenzi.pl  
Web address www.tenzi.pl
- Competent person responsible for the safety data sheet**  
Name technolog@tenzi.pl
- 1.4. Emergency telephone number**  
National Health Service (NHS) 111  
National poisoning information centre Scotland, NHS 24: 111

### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**  
The mixture is classified as dangerous.

Flam. Liq. 3, H226  
Eye Irrit. 2, H319  
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

#### Most serious adverse physico-chemical effects

Flammable liquid and vapour.

#### Most serious adverse effects on human health and the environment

Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

- 2.2. Label elements**

#### Hazard pictogram



#### Signal word

Warning

#### Hazard statements

H226 Flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long lasting effects.



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### Precautionary statements

- P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P405 Store locked up.  
P501 Dispose of container to properly labeled waste containers in accordance with national regulations.

### 2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 Registration number: 01-2119457610-43-XXXX	ALCOHOL	61	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2, H319: C ≥ 50 %	1
Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25-XXXX	isopropanol	2	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	1
CAS: 18472-51-0 EC: 242-354-0 Registration number: 01-2119946568-22-XXXX	Chlorhexidine digluconate	1,5	Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10)	

#### Notes

1 Substance for which exposure limits of Community for working environment exist.

Full text of all classifications and hazard statements is given in the section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

not available

#### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

#### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

#### If swallowed

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.



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### 4.2. Most important symptoms and effects, both acute and delayed

#### If inhaled

Not expected.

#### If on skin

Not expected.

#### If in eyes

Causes serious eye irritation.

#### If swallowed

Irritation, nausea.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

#### Unsuitable extinguishing media

Water - full jet.

### 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

### 5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

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

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

### 6.4. Reference to other sections

See the Section 7, 8 and 13.



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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Prevent contact with skin and eyes. No smoking. Use only non-sparking tools. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Avoid release to the environment.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed, original plastic container (high density polyethylene HDPE). Store this product in a dry environment that will be maintained at 5°C - 35°C temperature with a good ventilation system and an easy washable, nonabsorbable alkaline resistant floor. DO NOT expose the product to sunlight and keep away from heat, frost, sparks, flame and source of ignition.

Material of package

HDPE (2), High-density (linear) polyethylene (Plastics)



Storage temperature

min 5 °C, max 35 °C

#### The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

#### 7.3. Specific end use(s)

not available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

United Kingdom of Great Britain and Northern Ireland

EH40/2005 Workplace exposure limits (Third edition, published 2018)

Substance name (component)	Type	Value
ALCOHOL (CAS: 64-17-5)	WEL 8h	1920 mg/m <sup>3</sup>
	WEL 8h	1000 ppm
isopropanol (CAS: 67-63-0)	WEL 8h	999 mg/m <sup>3</sup>
	WEL 8h	400 ppm
	WEL 15min	1250 mg/m <sup>3</sup>
	WEL 15min	500 ppm

#### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

##### Eye/face protection

It is not needed.

##### Skin protection

It is not needed.

##### Respiratory protection

It is not needed.

##### Thermal hazard

Data not available.

##### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.



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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Appearance	colorless liquid
physical state	liquid at 20 °C
color	colourless
Odour	characteristic - alcoholic
Odour threshold	data not available
pH	6.5 (undiluted at 20 °C)
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	25 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	0.900 g/cm <sup>3</sup> (+-) 0.020
Solubility(ies)	
solubility in water	soluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

#### 9.2. Other information

Density	data not available
ignition temperature	data not available
Flash point: literature data	

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

not available

#### 10.2. Chemical stability

The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

#### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

No toxicological data is available for the mixture.



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### Acute toxicity

Based on available data the classification criteria are not met.

Chlorhexidine digluconate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	>5000 mg/kg		Rat (Rattus norvegicus)	

### Skin corrosion/irritation

Based on available data the classification criteria are not met.

Chlorhexidine digluconate

Route of exposure	Result	Time of exposure	Species
Oral	Slightly irritating	24 hour	Rabbit

### Serious eye damage/irritation

Causes serious eye irritation.

Chlorhexidine digluconate

Route of exposure	Result	Time of exposure	Species
	Serious eye damage		Rabbit

### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

### Germ cell mutagenicity

Based on available data the classification criteria are not met.

### Carcinogenicity

Based on available data the classification criteria are not met.

### Reproductive toxicity

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

### Aspiration hazard

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity



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### Acute toxicity

Harmful to aquatic life with long lasting effects.

Chlorhexidine digluconate

Parameter	Method	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	OECD 203	10.4 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC <sub>50</sub>		0.05-0.10 mg/l	48 hour	Daphnia (Daphnia magna)	
EC <sub>50</sub>		0.011 mg/kg	72 hour	Algae (Desmodesmus subspicatus)	
EC10		3 mg/l	16 hour	Pseudomonas putida	
EC <sub>50</sub>	OECD 209	25 mg/l	3 hour		Activated sludge

### 12.2. Persistence and degradability

#### Biodegradability

Chlorhexidine digluconate

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301A	70 %	10 day		Easily biodegradable

Data not available.

### 12.3. Bioaccumulative potential

Chlorhexidine digluconate

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
BCF	42				

Data not available.

### 12.4. Mobility in soil

Data not available.

### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. Other adverse effects

Data not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

RESIDUES AND WASTES:

DO NOT mix with other liquid wastes.

DO NOT empty into sewage system. Product should be totally used up according to its description.

If it's impossible to do so, dispose of this material and its container at hazardous or special waste collection point.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

07 06 04 other organic solvents, washing liquids and mother liquors \*



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### Packaging waste type code

15 01 02 plastic packaging

(\* ) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

## SECTION 14: Transport information

### 14.1. UN number

UN 1993

### 14.2. UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (ethanol, propan-2-ol)

### 14.3. Transport hazard class(es)

3 Flammable liquids

### 14.4. Packing group

III - substances presenting low danger

### 14.5. Environmental hazards

No

### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

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

not available

### Additional information

Hazard identification No.

UN number

Safety signs



3



## SECTION 15: Regulatory information

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

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Environmental Protection Act 1990 as amended. Clean Air Act 1993 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

### 15.2. Chemical safety assessment

For mixture:

A Chemical Safety Assessment has not been carried out.

For the following substances, mixtures:

d-gluconic acid, compound with N, N'-bis (4-chlorophenyl) -3,12-diimino-2,4,11,13-tetraazatetradecanediamidine (2:

1) (CHDG): the manufacturer has performed a chemical safety assessment

propan-2-ol: the manufacturer has performed a chemical safety assessment

ethyl alcohol: the manufacturer has performed a chemical safety assessment

## SECTION 16: Other information

### A list of standard risk phrases used in the safety data sheet

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.





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- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

### Guidelines for safe handling used in the safety data sheet

- P102 Keep out of reach of children.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405 Store locked up.
- P501 Dispose of container to properly labeled waste containers in accordance with national regulations.

### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

### Key to abbreviations and acronyms used in the safety data sheet

- ADR European agreement concerning the international carriage of dangerous goods by road
- BCF Bioconcentration Factor
- CAS Chemical Abstracts Service
- CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
- DNEL Derived no-effect level
- EC Identification code for each substance listed in EINECS
- EC<sub>50</sub> Concentration of a substance when it is affected 50% of the population
- EINECS European Inventory of Existing Commercial Chemical Substances
- EmS Emergency plan
- EU European Union
- IATA International Air Transport Association
- IBC International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
- IC<sub>50</sub> Concentration causing 50% blockade
- ICAO International Civil Aviation Organization
- IMDG International Maritime Dangerous Goods
- INCI International Nomenclature of Cosmetic Ingredients
- ISO International Organization for Standardization
- IUPAC International Union of Pure and Applied Chemistry
- LC<sub>50</sub> Lethal concentration of a substance in which it can be expected death of 50% of the population
- LD<sub>50</sub> Lethal dose of a substance in which it can be expected death of 50% of the population
- LOAEC Lowest observed adverse effect concentration
- LOAEL Lowest observed adverse effect level
- log K<sub>ow</sub> Octanol-water partition coefficient
- MARPOL International Convention for the Prevention of Pollution From Ships
- NOAEC No observed adverse effect concentration
- NOAEL No observed adverse effect level
- NOEC No observed effect concentration
- NOEL No observed effect level
- OEL Occupational Exposure Limits
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted no-effect concentration
- ppm Parts per million
- REACH Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID Agreement on the transport of dangerous goods by rail
- UN Four-figure identification number of the substance or article taken from the UN Model Regulations
- UVCB Substances of unknown or variable composition, complex reaction products or biological materials



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VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
STOT SE	Specific target organ toxicity - single exposure

### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

### Recommended restrictions of use

not available

### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### More information

Classification procedure - calculation method. Classification procedure - based on flash point test results.

### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.