

in accordance with Regulation (EC) No 1907/2006 of the European Parliament and of the Council as amended

## **DOCTOR GUARD**

Date of creation	15.05.2020	Update number:	1	
Revision date	10.02.	2023 Version number	1.0	

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

#### 1.1. Product

identifierDOCTO

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Substance/mixtu

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Numerbrak (see batch number)

# 1.2. Relevant identified uses of the substance or mixture and uses advised against Intended uses of the mixture

The product is designed for airborne disinfection of premises (with and without food contact).

#### Uses advised against

Do not use the product in any other way than those specified in section 1.

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

#### Manufacturer

Name or trade name MEDIA-SYSTEM Mirosław Trzebiński

Address1 Maja 56, Kielce, 25-511

Poland

REGON 260097831

Phone+48/ 413358334 info@doctorguard.eu

E-mail info@doctorguard.eu
Website address www.doctorguard.eu
E-mail address of the competent person responsible for the safety data sheet

NameMEDIA-SYSTEM Mirosław Trzebiński

info@doctorquard.eu

#### 1.4. Emergency telephone number

E-mail

Toxicological Information and Laboratory Analysis Laboratory Jagiellonian University Collegium Medicum tel. 012 - 411 99

#### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification of the mixture according to Regulation (EC) No 1272/2008

Mixture not classified as hazardous according to Regulation (EC) No 1272/2008. The full wording of all

classifications and H-phrases is given in Section 16.

## 2.2. Elements of signage

there is no

#### 2.3. Other risks

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. The mixture does not contain substances meeting the criteria for PBT or vPvB substances in accordance with Annex XIII, Regulation (EC) No 1907/2006 (REACH) as amended.

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

#### 3.2. Mixtures

#### **Chemical characteristics**

Only a very small amount of the gaseous component constantly escapes through the unopened special plastic rod. This value is less than 0.1ppm of chlorine dioxide (AGW) if the rod is used in accordance with the manufacturer's instructions and the rooms to be disinfected are used 'normally'. The average concentration of chlorine dioxide (30 d) is 0.029 ppm, equivalent to  $10.2 \mu g/120 L$ .

The mixture contains the following hazardous substances and substances with specific maximum concentrations in the working atmosphere



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Identification numbers	Name of substance	Content in % by weight	Classification according to Regulation (EC) No 1272/2008	Attenti on
CAS: 7732-18-5 EC: 231-791-2	water	98,78	is not classified as dangerous	
Index: 607-750-00-3 CAS: 77-92-9 EC: 201-069-1	citric acid	1	Eye Irrit. 2, H319 STOT SE 3, H335	
Index: 022-006-00-2 CAS: 13463-67-7 EC: 236-675-5	titanium dioxide	0,2	Carc. 2, H351 (inhalation)	1, 2, 3, 4
CAS: 7758-19-2 EC: 231-836-6	Sodium chlorite	0,02	Ox. Sol. 1, H271 Acute Tox. 3, H301 Acute Tox. 2, H310 Skin Corr. 1B, H314 STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412 EUH032 EUH071	

#### **Comments**

- Note V: If the substance is to be placed on the market as fibres (< 3  $\mu$ m in diameter, > 5  $\mu$ m in length and aspect ratio  $\geq$  3:1) or as particles of the substance meeting the WHO criteria for fibres or as particles with modified surface chemistry, their hazardous properties must be assessed in accordance with Title II of this Regulation to assess whether a higher category (Carc. 1B or 1 A) and/or additional routes of exposure (oral or dermal) should be used.
- Note W: The carcinogenic hazard associated with this substance has been observed to arise when respirable dust is inhaled in quantities leading to severe impairment of the natural mechanisms for removal of particles from the lungs.
  - This note is a description of the specific toxic effects of the substance and not a criterion for classification according to this Regulation.
- 3 Note 10: The classification as a respiratory carcinogen applies only to mixtures in powder form containing 1 % or more titanium dioxide in particle form with an aerodynamic diameter  $\leq$  10  $\mu$ m or incorporated in such particles.
- 4 Substance for which exposure limits have been set.

The full wording of all classifications and H-phrases is given in section 16.

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Take care of your own safety. If health problems occur or if in doubt, notify your doctor and provide him with the information from this safety data sheet.

#### In case of inhalation

If inhaled, move person to fresh air. If not breathing, apply artificial respiration.

## In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

As a precaution, flush eyes with water

## In case of ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

#### delayed On entering the respiratory tract

Irritation of the lungs. Irritation of the respiratory tract.

### In case of skin contact

Shortness of breath, cough, headache, nausea, vomiting, eye irritation, tearing, Catarrh. Rash.



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## In case of eye contact

no data available

## In case of ingestion

no data available

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

Symptomatic treatment. In case of pulmonary irritation, dexamethasone areozole is used as first line treatment.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing agents

## Suitable extinguishing media

Use fire extinguishing agents suitable for local conditions and the environment.

## Unsuitable extinguishing agents

Carbon dioxide (CO2), extinguishing powder

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

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## 5.3. Information for the fire brigade

PE packaging is exposed to fire or high temperatures cool by spraying water.

#### **SECTION 6: Accidental release measures**

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

Ensure adequate ventilation. Avoid contamination of skin and eyes. Avoid inhalation of vapours, mist or gas

### 6.2. Environmental precautions

Do not allow the product to enter the sewage system.

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

Store in suitable, closed containers for disposal.

## 6.4. References to other sections

no data available

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

## 7.1. Precautions for safe handling

Normal fire prevention measures.

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

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature :<200C, Protect from frost. Protect from direct sunlight.



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

no data available

#### SECTION 8: Exposure controls/personal protective equipment

#### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits have been set.

PolandDz .U. 2018 item 1286

Name of substance (ingredients)	Туре	Value	Attention
Titanium dioxide - inhalable fraction (CAS: 13463- 67-7)	NDS	10 mg/m³	Inhalable fraction - the fraction of an aerosol entering through the nose and mouth which, once deposited in the respiratory tract, constitutes a health hazard, determined in accordance with EN 481, The simultaneous determination of the concentrations of the respirable silica fraction is mandatory crystalline.

#### 8.2. Exposure controls

Do not eat, drink or smoke while working. Wash your hands thoroughly with soap and water after work and before taking a break to eat and rest.

## Eye or face protection

It is not needed.

### Skin protection

Use protective gloves for prolonged or repeated use.

## **Respiratory protection**

Half mask with organic vapour filter, possibly an insulating breathing apparatus when exposure limits are exceeded or in environments with difficult ventilation.

## Heat hazard

No data available.

## **Environmental exposure controls**

Please observe the usual measures for the protection of the working environment, see section 6.2.

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

## 9.1. Information on basic physical and chemical properties

Appearance

physical state liquid at 20 °C

form liquid colour yellow colour intensity bright

OdourVery faint odour similar to chlorine

pH<3 (undiluted)

Melting point/freezing point0 °C Initial boiling point and boiling range point0 °C  $100 \, ^{\circ}$ C

Ignition temperature no data available

Flammability (solid, gas)

Notflam

mable Upper/lower flammability limit or upper/lower limit

explosiveness

Explosion limit not applicable Vapour

Websit 4



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pressure nodata available Solubility



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solubility in water Fully miscible
Partition coefficient: n-octanol/water no data available
Auto-ignition temperature not applicable

Decomposition temperature >180 °C

Viscosity

Kinematic viscosity no data available density 1 g/cm³ at 20 °C

9.2. Other information

Explosive properties Non-explosive

Oxidising properties Does not react with combustible

materials

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

#### 10.1. Reactivity

It breaks down as it warms up.

### 10.2. Chemical stability

Stable at ambient temperature.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions are known.

#### 10.4. Conditions to avoid

Alkalis, base metals, heat, UV radiation, protect from frost.

#### 10.5. Incompatible materials

Protect against strong acids and bases as well as oxidising substances.

## 10.6. Hazardous decomposition products

No decomposition when used as intended.

#### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Inhalation of solvent vapours above the exposure limits for the working environment can lead to acute inhalation poisoning, and this depends on the concentration level and the exposure time. No toxicological data are available for the mixture.

#### **Acute toxicity**

None.

#### Skin corrosion/irritation

None

#### Serious eye damage/irritation

No irritant effect.

## Respiratory or skin sensitisation

Sensitising effects are not known.

## Mutagenic effects on germ cells

Based on the available data, it does not meet the classification criteria.

#### **Carcinogenic effects**

Based on the available data, it does not meet the classification criteria.

# Reproductive toxicity

Based on the available data, it does not meet the classification criteria.

# Toxic effects on target organs - single exposure

Based on the available data, it does not meet the classification criteria.

## Toxic effects on target organs - repeated exposure

Based on the available data, it does not meet the classification criteria.

## **Aspiration hazard**

Based on the available data, it does not meet the classification criteria.



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#### Other data

According to our experience and the information available to us, the product does not cause adverse health effects with proper handling and use. The substance does not need to be labelled due to the EC lists in the latest valid version.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

#### Acute toxicity

No classification according to the calculation method of the "EC General Classification guideline for mixtures" in the latest valid version.

#### Other data

According to our experience and the information available to us, the product does not cause adverse health effects with proper handling and use. The substance does not need to be labelled due to the EC lists in the latest valid version.

#### 12.2. Persistence and degradability

Impermanent; reacts quickly with organic material. Behaviour in wastewater treatment plants: No interference with degradation activity in biological wastewater treatment plants is to be expected at low concentration discharges.

## 12.3. Bioaccumulative potential

Not applicable. The product consists of approx. 99 % water and approx. 1 % salt.

## 12.4. Mobility in soil

Not applicable; rapid degradation occurs.

## 12.5. Results of PBT and vPvB assessment

PBT: not applicable vPvV: not applicable

#### 12.6. Other adverse effects

Do not allow uncontrolled release into the environment. Ecotoxicological data are not available. According to the current state of knowledge, no adverse ecotoxicological effects are to be expected.

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#### **SECTION 13: Disposal considerations**

## 13.1. Waste disposal methods

The used product should be recycled or, if possible, used for another purpose. Otherwise, hand it in for authorised disposal.

#### Waste management regulations

The product can be disposed of in municipal waste.

#### Waste type code

200399 Municipal waste not included in other subgroups

## Waste type code for packaging

150102Plastic packaging

## **SECTION 14: Transport information**

## 14.1. UN number

not subject to transport regulations

## 14.2. UN proper shipping name

irrelevant

## 14.3. Transport hazard class(es)

irrelevant

## 14.4. Packing group

irrelevant

## 14.5. Environmental risks

no

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## 14.6. Special precautions for users

Cross-reference in sections

4 to 8.



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

not applicable

## **SECTION 15: Regulatory information**

## 15.1. Safety, health and environmental regulations specific to the substance or mixture

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 on the making available on the market and use of biocidal products, as amended. Public Health Act. Announcement of the Marshal of the Seim of the Republic of Poland of 19 April 2016 on the announcement of the uniform text of the Act - Environmental Protection Law (Journal of Laws 2016, item 672). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18. December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93, Commission Regulation (EC) No 1488/94, Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC in its current wording. Regulation (EC) No 1272/2008 of the European Parliament and of the Council as amended. Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals. Act of 25 February 2011 on chemical substances and their mixtures (Journal of Laws 2020, item 2289, 2021, item 2151). Regulation of the Minister of Health of 20 April 2012 on the labelling of packaging of hazardous substances and mixtures and certain mixtures (Journal of Laws no, item 445). Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classification of chemical substances and their mixtures (Journal of Laws no., item 1018). Act of 28 May 2020 amending the Act on chemical substances and their mixtures and certain other acts (Journal of Laws 2020, item 1337) Announcement of the Marshal of the Sejm of the Republic of Poland of 1 February 2019 on the announcement of the uniform text of the Act on transport of dangerous goods (Journal of Laws 2020, item 154). Act of 23 January 2020 on amending the Act on waste and certain other acts. (Journal of Laws of 23 January 2020, item 150). Act of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws 2013, item 888). Ordinance of the Minister of the Family, Labour and Social Policy of 12 June 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the working environment.

## 15.2. Chemical safety assessment UN proper shipping name

Non-flammable liquid, Water hazard class: WGK 1 (own classification): slightly hazardous to water.

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## **SECTION 16: Other information**

#### List of hazard statements used in the safety data sheet

H271May cause fire or explosion; strong oxidiser.

H301Toxic if swallowed.

H310Danger of death in contact with skin.

H314 Causes severe skin burns and eye damage.

H319Is an eye irritant.

H335May cause respiratory irritation.

H351Suspected to cause cancer by inhalation.

 ${\sf H373May}$  cause damage to organs through prolonged or repeated

exposure.

H400Severely toxic to aquatic organisms.

H412Harmful to aquatic life with long lasting effects. List of additional hazard

**statements used in the safety data sheet** EUH032In contact with acids liberates very toxic gases.

EUH071Respiratory corrosive.

## Further information important for safety and protection of human health

The product may not - without the specific consent of the manufacturer/importer - be used for any purpose other than that stated in section 1. The user is responsible for compliance with all related health regulations.

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Explanation of abbreviations and acronyms used in the Safety Data Sheet

ADREuropean Agreement concerning the international carriage of dangerous goods by road

BCFBioconcentration factor

**CASChemical Abstracts Service** 

CLPRRegulation (EC) No 1272/2008 on classification, labelling and

packaging of substances and mixtures

EINECSE European Inventory of Existing Commercial Chemical Substances

Emergency EmSPlan

EuPCSE European Product Classification System IATInternational Air Transport Association

IBCInternational Code for the Construction and Equipment of Ships

Carrying Dangerous Chemicals in Bulk

ICAOrganisation for International Civil Aviation

IMDGInternational Regulations for the Maritime Transport of

Dangerous Goods

INCIInternational Nomenclature of Cosmetic Ingredients
ISOM International Organisation for Standardisation
IUPACInternational Union of Pure and Applied Chemistry

log KowActanol-water partition coefficient

LZOLotne organic compounds

MARPOLInternational Convention for the Prevention of Pollution from Ships

PELEL Maximum allowable concentration

MPECA Maximum Allowable Momentary Concentration NDSPMaximum allowable concentration ceiling

OELs Occupational exposure limits

PBT Persistent , bioaccumulative and toxic

ppmParts per million

REACHRegistration , evaluation, authorisation and restriction of chemicals

 $RIDRegulation \ concerning \ the \ international \ carriage \ of \ dangerous \ goods \ by \ rail$ 

EUEuropean Union

UNCzterdigit identification number of the material or object, derived from the

"UN Model Rules"

UVCBSubstances of unknown or variable composition, complex reaction

products or biological materials

vPvBB Very persistent and very bioaccumulative

EC identification code for each substance as stated in EINECS

Acute Tox.Acute Toxicity

Acute Hazardous to the aquatic environment (acute) Aquatic Chronic Hazardous to the aquatic environment (chronic) Carc.

Carcinogenicity

 $\hbox{Ox. Sol.} Oxidizing solid$ 

Skin Corr.Caustic effect on skin

STOT RED Toxic effects on target organs - repeated exposure STOT SED Toxic effects on target organs - single exposure

#### **Guidelines for training**

Familiarise workers with the recommended method of use, mandatory protective measures, first aid and prohibited handling.

### Recommended restrictions on use

Protect from sunlight, Do not expose to temperatures exceeding 50 °C / 122 °F **Information about** 

the data sources used to compile the safety data sheet Accident prevention regulations (UVV) - prevention rules (DGUV-V1)

## Other data

Classification procedure - calculation method.



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## Statement

The safety data sheet contains data to ensure health and safety at work and to protect the environment. The data given correspond to the current state of knowledge and experience and are in accordance with current legislation. They cannot be regarded as a guarantee of the suitability and usability of the product for a specific application.