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1: Description of the Preparation

1.1: Article description: ECO Disinfect

Registrationumber 74492

1.2: Application of the preparation: desinfection of surfaces against viruses especially also Corona viruses

1.3: Supplier: Rudolf Koller GmbH

A-3902

Vitis Niederösterreich Rudolf-Koller-Straße 1 Fon+43 2841 8207 Fax+43 2841 8221 office.vitis@rkoller.com

Poison control center of "Gesundheit Österreich GmbH"

Emergency call +43 1 406 43 43

1.4: Technical information: office.vitis@rkoller.com

1.5: Information about SDS: office.vitis@rkoller.com

1.6: Emergency information: +43 2841 8207 (Mo-Fr 8:00-16:00)

2: Possible Hazards- GHS Classification

2.1: Classification of the preparation: according to (EG) Nr 1272/2008: CLP not rated

active biocide: 0,2 bis 0,4 g/l (0,02 bis 0,04 %) EUH031 sets free toxic gases in contact with acids

be careful with biocides; first study labelling and product information

no specific dangers known

2.2: Labelling according to (EG) Nr. 1272/2008 not necessary

2.3: Additional information to risks:

Contains no Polybutylenterephthalate (PBT) or other persistent, bioaccumulation (vPvB) substances

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3: Composition / information about components

3.1: Composition Preparation

3.2: Chemical characterisation

Description: aqueous solution of following non rated First Aid components

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Component	Description	Content	GHS
	"active Chlorine from Sodium- chloride by electrolysis"	> 0,01% - < 0,1%	H290 EUH031 P410 + P412
EG-Nr (EINECS).: 231-598-3 CAS: 7647-14-5	Sodiumchloride	> 0,1% - < 1,0%	

additional advice: max. MAK-values chapter 8

dermatologically tested, no skin change HET-CAM Test 0

4: First Aid

4.1: First Aid Measures:

General: no special measures, consult doctor in case of complaints

after eye contact: after irritation spill eyes careful after skin contact: flush with plenty of water

if swallowed wash out mouth thoroughly and drink a large amount of water after inhaling after irritation, bring the affected person into the fresh air. :

4.2: Important acute and delayed symptoms and effects: no infomation

4.3. **Information for the doctor:** Treat symptomatically, let show Safety data sheet

5: Fire fighting measures

5.1: Extinguishing agent

Suitable extinguishing media: The product itself is not flammable

Choose fire-fighting measures suitable for environment fire

5.2: Special hazards arising from the substance or mixture:

Traces of chlorine gas can occur

5.3: Advices for firefighting: no special additional measures

6.: Measures for unintended release

6.1: Personal precautions, protective equipment, emergency measures

Follow the usual caution measures while dealing with chemicals. No special measures

6.2: Environmental measures:

After release to the environment flush with plenty of water

6.3: Methods and material for containment and cleaning up:

Absorb with liquid binding material and dispose of it properly.

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6.4: Additional advices See chapters 8 and 13

7: Handling and Storage

7.1. Precautions for safe handling

Advices for safe handling secure good ventilation of the working room and storage

Precautions against fire and explosion product does not combust and does not explode

In case of correct use there are no special measures necessary

During filling and pouring wear protective glasses

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage facilities and containers: keep only in the original container, keep container

tightly closed, protect from frost and direct sunlight; recommended storage temperature is

+5°C to +25°C

Hints for combined storage: no contact with acids

other indications: none

Storage category: 12 non-combustible liquids

comply with AUVA statements at www.auva.at

7.3. Information about protection against fires and explosions:

no specific instructions

Consult instructions

8: Explosion limitation and personal protective equipment

8.1. Occupational exposure limit value:

Components with limit values that require monitoring at the workplace are not included in relevant amounts

A national limit for exposure at the workplace is not available.

8.2. Limitation and monitoring of exposure

Care for a good ventilation in the working room

Personal protective equipment see chapters 6 and 7

The usual caution measures while dealing with chemicals have to be

Protective and hygienic measures observed.

Breathing protection not necessary Hand protection not relevant

Eye and face protection wear protective goggles

Body protection not relevant

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9: Physical and chemical properties

9.1: Information on basic physical and chemical properties

pH-value at 25°C 6,0-8,0

Melting point: about -2°C at normal pressure (1013 Pa) Boiling point: ca. 100°C at normal pressure (1013 Pa)

Ignition temperatur: incombustible
Flashpoint: [°C]: not applicable
Flammability: incombustible
upper/ lower explosion limit both not applicable
vapou pressure data are not available

solubility in water (20°C) fully miscible
Evaporation rate: data are not available
relative density25°C: ca. 1,004 g/l

spontaneous combustion no self-ignition decomposition temperature: 170 °C

explosive properties: not explosive, no exothermally reaction with combustible material

oxidizing properties no exothermally reaction with combustible material aqueous solution < 10% not more corrosive than water

9.2. Other Information

appearance: clear, colourless liquid

odor: faint smell like swimming-pool water

odour threshold data is not available

does not contain any solvent liquid behaves like water

10: Stability und Reactivity

10.1: Reactivity see 10.3

none known when used in accordance to instructions

10.2: Chemical stability stabile under the specified storage conditions

10.3: Dangerous Reactions reacts with acids, strong oxidising effect

10.4: Conditions to avoid protected from heat and direct sunlight

10.5: Incompatible materials not passivated unprotected metals, acids

10.6: Hazardous decomposition products none known when used in accordance to instructions

10.7: thermal decomposition: formation of sodium chlorate

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11: Toxicological Information

11.1: Information on toxicological effects

Acute toxidty (oral): classification criteria are not fullfilled with the data available

Acute toxidty (dermal): dermatological tests, no skin changes

Acute toxidty (inhalation): classification criteria are not fullfilled with the data available

Etchsability and irritation of the skin: dermatological tests, no skin changes

Eye damage/-irritation: HET-CAM 0 (zero)

Airway sensitizing classification criteria are not fullfilled with the data available

Skin sensitizing dermatological tests, no skin changes

Gametes mutagenicity:

Carcinogenicity:

Carcinogenicity:

Reproductive toxicity:

Breast milk effects on and about:

Target organ toxicity (single exposure):

Target organ toxicity (repeated exposure):

Cassification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not fullfilled with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full with the data available classification criteria are not full full wi

Aspiration hazard: classification criteria are not fullfilled with the data available

Other informations:

LD₅₀ rat oral: >5.000 mg/kg

Informations about sodium hypochlorite: LD₅₀ rabbit dermal: >5.000 mg/kg

in a concentration of 0,1%

Informations to biocides sodium hypochlorite / hypochlorous acid in product

with the same agent for skin disinfection can be used

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12. Environmental data

12.1. Toxidity in according to (EG) Nr 1272/2008

information for sodium hypochlorite – CAS: 7681-52-9

ending points of acute aquatic toxidity: LC₅₀ fishes >0,032 mg/l – 96 h

 LC_{50} crustaceans >0.032 mg/l -48 h LC_{50} algae =46 mg/l -96 h

Water hazard class not harmful to water.

no classification in accordance to calculation method

Additional information: "General Classification Guideline for Preparations of the EC" as

issued in the last version.

:

12.2. Persistence and degradability:

Not persistent, reacts quickly with organic materials.

discharging of low concentration no influence on the biodegradation effect

Behaviour in sewage plants

12.3. Bioaccumulative potential

Not relevant. The product contains approx. 99% of water and approx. 1% salts

12.4. Mobility:

Not relevant, quick degradation happens

12.5. PBT- und vPvB-assessment

PBT: inapplicable vPvB: inapplicable

12.6. Other harmful effects

Avoid uncontrolled release into environment. Ecological data is not available. Negative ecotoxic effects according to the current state of knowledge are not expectable.

13. Instructions for the disposal

13.1. Processes for waste treatment:

Product

Waste code number: 20-03-99 = urban waste

waste disposal according to official regulations

Recommandation: reduction with sodium thiosulfate or sodium, sulfite

Packaging

Waste code number: 15-01-02 = Plastic packaging

waste disposal according official regulations

Recommandation: emptied, non contaminated packaging can be recycled

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14. Transport information

14.1 UN-Number

ADR, ADN, IMD, IATA lapse

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14.2 Proper UN shipping name

ADR, ADN, IMDG, IATA lapse

14.3 Transport hazard class

ADR, ADN, IMDG, IATA lapse

14.4 Packaging group

ADR, IMDG, IATA lapse

14.5 Environmental hazards

Marine pollutants-IDMG no

14.5 Special precautions for user

Not applicable. No dangerous goods in respect to transportation regulations for land-, ship, and airtransportation (ARD and GGVSE, IDMG/GGVsee, ICAO-Tl and IATA/DGR)

15. Regulations

15.1. Regulations for safety, health and invironmental protection/specitic regulations for -mixtures

Storage category: 12 = non-flammable liquids

Water hazard class: WGK 1 (self-classification): slightly polluting

Addioinal Regulations, restrictions and prohibition order

Content of VOC not applicable

Substances of Very High Concern (SVHC) in accordance with REACH article 57 are not included.

15.4: Chemical safety assessment: not necessary print: 23.3.2020 version 2 status: 23.3.2020

16. Other informations

16.1 Additional informations

Wording of the H- and P phrases see chapter 3

H290 = may be corrosive to metals.

EUH031 = Contact with acids liberates toxic gas

P410 = protect against sunlight

P412 = do not expose to temperatures > 50°C / 122°F

Literatur

Accident prevention regulation

This safety data sheet supersedes all prior versions.

16.2 Abbreviations and Acronyms

ADN Accord europeen relatif au transport international des marchandises dangereuses par voies de

navigation intérieure

ARD Accord européen relatif au transport international des marchandises Dangereuses par Route

CAS Chemical Abstracts Service

CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures

EG Europäische Gemeinschaft

EINECS European Inventory of Existing Commercial Chemical Substances

EU Europäische Union GefStoffV Gefahrstoffverordnung

GGVSE Verordnung über die innerstaatliche und grenzüberschreitende Beförderung gefährlicher Güter auf der

Straße, mit Eisenbahnen und auf Binnengewässern

GGVSee Gefahrgutverordnung See

IMDG International Maritime Code for Dangerous Goods

ICAO-TI International Civil Aviation Organization - Technical Instructions

IATA-DGR International Air Transport Association - Dangerous Goods Regulations

PBT Polybutylenterephthalat(e)

REACH Registration, Evaluation, Authorization of Chemicals

SVHC Substances of Very High Concern VOC Volatile Oorganic Compounds

vPvB very Persistent and very Bioaccumulative substances / sehr persistente und sehr bioakkumulierbare

Stoffe

Disclaimer

The given information is based on the state of science but is not a binding confirmation of product properties and does not establish any contractual relationship. Legal provisions have to be followed on its own responsibility.

Upgrade of document 23.3.2020

ZI Dr. Josef Gustav PAUL