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SAFETY DATA SHEET

According to Regulation (EC) No. 2015/830 (REACH)

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade Name: ANTIBACTERIAL LIQUID SANITIZER

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

Main use category: Disinfectant with a virucidal effect. Uses advised against: Other than listed above.

1.3. Details of the supplier of the safety data sheet

Company Name: PIERRE RENE Sp. z o.o. Adress: Ogrodowa 7, 76-270 Ustka

Phone: 0 59 814 66 65 E-mail: info@pierrerene.pl

E-mail address of the person responsible for the safety data sheet: tomasz.piergies@consultchem.pl

1.4. Emergency telephone number

Telephone available 7:00 - 16:00 from Monday to Friday: + 48-44-7249562 European emergency number - 112 Fire brigade - 998 Medical emergency - 999

SECTION 2

HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

According to: 1272/2008 [CLP]:

Flam. Liq. 2, H225 Highly flammable liquid and vapour.

Eye Irrit. 2, H319 Causes serious eye irritation.

2.2. Label elements

Pictogram:





Signal word: DANGER

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Hazard statement:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Prevention precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

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.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of container in accordance with national regulation.

2.3. Other hazards

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2. Mixtures

| Substance name/ REACH registration number | Einecs nr | CAS nr | Classification | Hazard statements | Content |
|---|-----------|---------|------------------------------|-------------------|---------|
| Ethanol* 01-2119457610-43-XXXX | 200-578-6 | 64-17-5 | Flam. Liq. 2 Eye Irrit. 2 | H225 H319 | 80% |
| Glycerol | 200-289-5 | 56-81-5 | - | - | 1,5% |

The full text of each relevant H- phrase see in Section 16.

SECTION 4

FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove the affected person to fresh air. If symptoms persist or feel unwell, consult a physician.

Skin contact: Product for disinfecting the skin. If symptoms of irritation persist, consult a physician.

Eye contact: Rinse contaminated eyes, with wide eyelids, with a continuous stream of water for several minutes. If eye irritation persists, consult an ophthalmologist.

^{*} Specific Concentration limits: Eye Irrit. 2; : C ≥ 50 %

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Ingestion: Do not induce vomiting. Do not touch mouth with hands. Consult a physician.

Protection of first-aiders: Do not take any action that would put anyone at risk unless you are properly trained. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

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

If swallowed, the product may cause nausea, vomiting, balance and coordination disorders, visual burning disturbances, abdominal pain, weakness, muscular hypersensitivity, hyperacidity. Possible redness, tearing and of the eyes. Exposure to alcohol can enhance the effect of poisoning.

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

Get medical attention if you feel unwell. Show the safety data sheet, label or packaging to the medical personnel providing assistance. Advice to physician: symptomatic treatment.

SECTION 5

FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Foam, powder, carbon dioxide, water fog **Unsuitable extinguishing media:** Water jet.

5.2. Special hazards arising from the substance or mixture

In the case of fire, fumes containing carbon oxides are formed. Avoid breathing products released in the conditions of fire - they can pose a health hazard.

5.3. Advice for firefighters

Follow the procedures in force to fight chemical fires. In the event of a fire involving large quantities of product, remove / evacuate all bystanders from the danger area; call rescue teams, fire brigade.

Firefighters should exercise extreme caution in closed rooms due to the possible presence of toxic products of combustion and decomposition. Insulated breathing apparatus with full mask should be used in closed rooms. Wear standard body protection. Cool closed containers exposed to fire or high temperature with dispersed currents of water from a safe distance, if possible and safe to remove them from the danger area. Do not allow sewage after firefighting to reach sewage system and water reservoirs. Dispose of sewage and fire residues in accordance with applicable regulations. Persons involved in firefighting should be trained, equipped with self-contained breathing apparatus and full protective clothing

SECTION 6

ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

It is recommended to use personal protective equipment - see section 8 of the safety data sheet. Limit the access of bystanders to the area of failure until the end of the relevant cleaning operations. In the event of large spills, isolate the affected area. Ensure that failure recovery and its effects are performed only by trained personnel. Avoid contact with eyes, skin and clothing. Do not breathe vapors / mists. If released in a closed room, ensure effective ventilation / ventilation. Remove sources of ignition, extinguish open flame, do not smoke.

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6.2. Environmental precautions

If possible and safe, eliminate or limit product release. In the event of large spills, limit the spread of the broads by embanking the area. Do not allow the product to enter drains, water and soil. Notify relevant rescue and environmental protection services and administration authorities.

6.3. Methods and material for containment and cleaning up

Embank the contaminated area. Recover liquid by pumping or sprinkle with inert absorbent material (sand). Collect in specially prepared and labeled containers. For disposal in accordance with applicable regulations. Rinse the contaminated surface with water and detergent, and then with water only.

6.4. Reference to other sections

See also sections 8 and 13 of the Safety Data Sheet.

SECTION 7

HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide adequate ventilation to keep substance concentrations below the limit values. Do not breathe vapors. Avoid contact with skin and eyes. Observe the usual precautions when working with the product - Eliminate sources of ignition - Do not use an open flame. Do not drink, eat or smoke. Wash hands before and after working with the product. Ground the equipment used. Use personal protection - see section 8 of the safety data sheet.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed, properly labeled containers in a cool, well-ventilated place. Keep away from food, foodstuffs and animal feed. Keep away from heat, protect from direct sunlight. Protect the product against contamination. Keep away from strong oxidants.

7.3. Specific end use(s)

See section 1.2 of the Safety Data Sheet.

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Ethanol:

NDS 1900 mg/m³, NDSCh -

Glycerol - inhalable fraction:

NDS 10 mg/m³, NDSCh -

8.2. Exposure controls

Appropriate engineering controls: General ventilation and / or local exhaust to maintain the concentration of the harmful agent in the air below the set allowable concentrations. Local exhaust is preferred because it allows control of emissions at source and prevents spreading throughout the entire work area.

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Eye protection: Safety glasses (EN 166).

Hand and skin protection: Product for use on the skin.

Respiratory protection: Under normal conditions of use are not required. In the case of concentrations exceeding the permissible values or insufficient ventilation, use an approved respirator with an appropriate filter or combined filter. In the case of work in a limited space, insufficient oxygen content in air, high uncontrolled emissions or other circumstances when the mask does not provide adequate protection, use a self-contained breathing apparatus.

Thermal hazards: Flammable.

Environmental exposure controls: Do not allow large quantities of product to enter ground water, sewage system, sewage or soil.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance : Liquid

Odour : Characteristic
Odour threshold : No data available
pH : Not determined
Melting/solidification temperature : -117 °C (ethanol)

Initial boiling point/boiling range: : Not lower than 85,5°C (ethanol)

Flash point : No data available Ignition point : No data available Flammability : No data available Upper/lower flammability or explosive limits : 15%/3,5% (for ethanol) Vapor pressure : No data available Vapour density : No data available Density : About 0,856 g/cm³ Solubility : Very soluble in water Distribution coefficient n-octanol/ water : No data available Auto-ignition temperature : No data available

Auto-ignition temperature : No data available
Evaporation rate : No data available
Decomposition temperature : No data available
Viscosity : No data available
Explosive properties : Not explosive
Oxidizing properties : Not oxidizing

9.2. Other information

No data available.

SECTION 10

STABILITY AND REACTIVITY

10.1. Reactivity

The product reacts with strong oxidants, alkali metals, metal oxides, acids.

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10.2. Chemical stability

The product is stable under normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Product vapors may form explosive mixtures with air. The product may react with light metals and give off hydrogen.

10.4. Conditions to avoid

High temperatures, open flame and other ignition sources, direct sunlight.

10.5. Incompatible materials

Strong oxidants, strong acids, strong bases, aldehydes, aluminum.

10.6. Hazardous decomposition products

Not known.

SECTION 11

TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Based on available data, the classification criteria are not met.

Ethanol:

Acute toxicity

LD50: >7060 mg/kg (oral, rat)

LD50: >3450 mg/kg (dermal, mouse)

Chronic toxicity

LD50: 6,2-15 g/kg (oral, rat)

LC50: > 50 mg/l/4h (inhalation, rat)

Harmful if swallowed:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitization:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

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Carcinogenicity:

Based on available data, the classification criteria are not met.

Harmful effect on reproduction:

Based on available data, the classification criteria are not met.

STOT-single exposure:

Based on available data, the classification criteria are not met.

STOT-repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

SECTION 12

ECOLOGICAL INFORMATION

12.1 Toxicity

The product is not classified as hazardous to the environment.

Ethanol:

LC50: 8140 mg/l/48h (fish, Leuciscus idus) EC50: 9268-14221 mg/l/48h (Daphnia magna)

EC50: 5000 mg/l/7d (algae, Scenedesmus quadricauda)

12.2 Persistence and degradability

The product is easily biodegradable.

12.3 Bioacumulative potential

Bioaccumulation is not expected.

Ethanol: log Pow -0.35 [method: OECD107], BCF <10

12.4 Mobility in soil

The mobility of the components of the mixture depends on their hydrophilic and hydrophobic properties and the abiotic and biotic conditions of the soil, including its structure, climatic conditions and soil organisms (mainly bacteria, fungi, algae, invertebrates).

12.5 Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC)1907/2006.

12.6 Other adverse effects

The product is not classified as hazardous to the ozone layer. The possibility of other harmful effects of the individual components of the mixture on the environment should be considered (ability to disturb the hormonal economy, impact on global warming).

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SECTION 13

DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendations regarding the mixture: Do not dispose to the sewers. Do not allow to contaminate surface and ground water. Waste product should be subjected to recycling or liquidated in approved incineration plants or waste treatment/disposal plants, according to regulations in effect.

The waste code should be given at the place of production.

Recommendations regarding used packaging: Recycling / liquidation of packaging wastes should be conducted according to regulations in effect.

PLEASE NOTE: Only packagings that are completely emptied and cleaned may be allowed to recycling! Use services of companies with appropriate authorization.

SECTION 14

TRANSPORT INFORMATION

14.1. UN number

ADR/RID, ADN, IMDG, IATA : UN 1987

14.2. UN Proper shipping name

ADR/RID, AND, IMDG, IATA : ALCOHOLS, N.O.S. (Ethanol)

14.3. Transport hazard class(es)

ADR/RID, ADN, IMDG, IATA : 3

14.4. Packing group

ADR/RID. ADN. IMDG. IATA : II

14.5. Environmental hazards

ADR/RID, ADN, IMDG, IATA : No

14.6. Special precautions for user

ADR/RID, ADN, IMDG, IATA : Note: flammable liquids

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not available.

SECTION 15

REGULATORY INFORMATION

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

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

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 (REACH).

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

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Not available.

SECTION 16

OTHER INFORMATION

Abbreviations and acronyms in the Safety Data Sheet:

NDS - The highest allowable concentration at the workplace.

NDSCh - Maximum allowable instantaneous concentration.

vPvB - very Persistent, very Bioaccumulative (substance).

PBT - Persistent, bioaccumulative, and toxic (substance).

LD50 - Dose that will kill 50% of the test animals.

LC50 - Lethal concentration for 50% of the test animals.

EC50 - Effective concentration - the effective concentration of the substance causing a reaction at 50% of the maximum value.

BCF - Biological concentration factor.

Log Pow - Distribution coefficient n-octanol/ water.

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID - Regulations concerning the International carriage of Dangerous Goods by Rail.

IATA - International Air Transport Association.

IMDG - International Maritime Dangerous Goods.

Hazard statements from section 3:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Methods used to classify the mixture in question: calculation method.

Advice on training for employees:

Employees who use the product should be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

This MSDS is not a quality certificate for the product. All data presented in this sheet are to be taken only as a help in safe handling in transport, distribution, use and storage. Persons handling the product should be informed about risks and precautionary measures. Information in the Safety Data Sheet relates to the above mentioned product and its specified uses only. They may be obsolete or insufficient for this product used in conjunction with other materials or in different applications than those specified in the Safety Data Sheet. The user is obliged to follow all applicable standards and regulations and is also responsible for inappropriate use of information contained in this sheet or for an inappropriate use of the product. In the case of special applications evaluate exposure and develop the appropriate procedure and training programs in order to ensure safety at work.

Safety Data Sheet prepared by Consultchem Tomasz Piergies