| Recording to Commission Regulation (EO) 1(0, 455/2010 milex 1 | | | | | | |
|---|-------------|--------------------------|------------|--|--|--|
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1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/ UNDERTAKING

Product identifier

Sterilforte

Relevant identified uses of the substance or mixture

Cleaning/ maintenance detergent for professional use – disinfectant based on 15% peracetic acid.

Disinfectant is not for direct human use. Food and drinking water disinfectant (**2**, **4** and **5** product type). It is used to whiten and disinfect laundry in health care and public institutions; for food and beverage industry's storage and usage equipment, containers, pipes, bottles, bottle washing equipment, and for surface disinfection; for drinking water disinfection, used to cool poultry slaughter. Should not have direct contact with food. Read the operating instructions and material safety data sheets before use. Biocide product authorization certificate number. (11-1) 11.2-A-020405PNO601204-13-160, is valid until 2018-11-19.

Disinfectant is used for equipment and vehicle surfaces in animal and poultry rearing and housing, for animal feed and water storage and usage equipment, containers, pipelines, transportation. For disinfection milking, milk cooling and storage equipment used on farms. **3 and 4** product type. Veterinary care and feed area biocide disinfectant. Veterinary biocide product authorization certificate number LT/ABPV/2014/0195 valid until 2019-04-12.

| Supplier/ Manufacturer | UAB "BS Chemical", Baltijos pr. 123-9, LT-93224 Klaipeda, Lithuania, tel./fax.: +370 46 366279, www.bs-chemical.com |
|---|---|
| E-mail address for a person responsible for the safety data sheet | dovile@bs-chemical.lt |
| Emergency telephone number | 112 (in Member State of EU). |
| | Estonia: 16662, calling from abroad (+372) 626 93 90. Hours of operation are during weekdays from Monday 9AM to Saturday 9AM (closed on Sunday and on national holidays). |
| | Latvia: +371 67042473. Service is available 24 hours. |
| | Lithuania: +370 5 236 20 52; +370 687 53378. |
| | Norway: 22 59 13 00. |
| | Poland: + 48 58 349 28 31, + 48 12 646 87 06, + 48 61 848 10 11, + 48 22 619 66 54 ext. 1240. |
| | 113 (in Member State of CIS). |
| | Russia: 8 (495) 621-68-85; 8 (495) 621-68-85. |
| | Belarus: +375 17 385 14 22. |

2. HAZARDS IDENTIFICATION

| Classification of the substance/ mixture according to Regulation (EU) No 1272/ | Signal word: Dangerous Hazard class: Organic peroxides, type F; Acute toxicity, category 4; Skin corrosion, subcategory 1A; Hazardous to the aquatic environment, category 3. Hazard statements: | | |
|--|--|-------|-------|
| 2008 [CLP/ | H272 May enhance fire, oxidizer. | GHS02 | GHS05 |

| DC | commission Regulation (EO) 110. 453/ 2 | The date of compilation: | 2009-07-27 |
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GHS]

H314 Causes severe skin burns and eye damage.

H302+H312+H332 Harmful if swallowed, by skin contact, inhalation.

Precautionary statements:

P220 Keep/ store away from clothing and flammable materials.

P280 Wear protective gloves / protective clothing / eye (face) protection.

P403 Store in a well-ventilated place.

P303+P361+P353 IF ON SKIN (or hair): Take off / remove all contaminated clothing. Rinse skin with water / shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P310 After direct contact or if you feel unwell: Immediately call a POISON CENTER or doctor.

Additional information: The removed product cannot be put back in the container.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Description of substance/ mixture

Mixture of substances listed below with no hazardous additions. Contains stabilizers - phosphonates.

Peracetic acid, 17-2119983566-21-0000

Hazardous components:

REACH registration number

| No | CAS No | EC No | Index No | Mass fraction, % | Name | Classification according to Regulation (EU) No 1272/ 2008 [CLP/ GHS] |
|----|---------------|---------------|------------------|------------------------|--------------------|--|
| 1. | 7722- 84-1 | 231- 765-0 | 008-003- 00-9 | 26,6 | Hydrogen peroxide% | Ox. Liq. 1, H271; Acute Tox. 4 *, H302; Skin Corr. 1A, H314; Acute Tox. 4 *, H332 |
| 2. | 64-19-7 | 200- 580-7 | 607-002- 00-6 | 15 - 30 | Acetic acid% | Flam. Liq. 3, H226; Skin Corr. 1A, H314 |
| 3. | 79-21-0 | 201- 186-8 | 607-094- 00-8 | 15,0 | Peracetic acid% | Flam. Liq. 3, H226; Org. Perox. D ****, H242; Acute Tox. 4 *, H302; Acute Tox. 4 *, H312; Skin Corr. 1A, H314; Acute Tox. 4 *, H332; Aquatic Acute 1, H400 |

Note: risk phrases and other signs are listed in Sections 2 and 16.

4. FIRST AID MEASURES

Description of the first aid measures

In all cases if the damage to health occurred, seek immediate medical attention. If a person is unconscious do not give any water/ do not put anything into the mouth. In If substance/mixture poisoning case was discovered immediately contact the nearest Poisons control and information centre.

| According to Commi | ssion Regulation (EU) No. 4 | | 2000.05.05 | |
|--|---|--|--|--|
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| After inhalation | immediately stop th fresh air, provide a seek medical advice | olution's aerosols or vapor e contact - take out a suffer peace. If respiratory impairm . If a person lost consciousne d carry to the medical institut | ing person to the ent has occurred ss, lay him down | |
| After skin contact | ÷ | ve all contaminated clothin plenty of water. If sympt al advice. | - | |
| After eye contact | eyes with running | s soon as possible, at least water lifting and lowering by present and it is easy to do. | eyelids. Remove | |
| After swallowing | substance residues f | miting. If a person is confrom mouth, rinse it with wath medical attention. | | |
| 5. FIREFIGHTING MEASURES | | | | |
| Extinguishing media | (CO2).Fire-fighting | oam, extinguishing powder, equipment must be selected burning materials. Unsuital pounds. | ed assessing the | |
| Special hazards arising from the substance/ mixture | accident, an increas spontaneous decay. fire. Because of the container and pipel: | Contact with combustible material may cause fire. During the fire accident, an increasing temperature may stimulate the risk of spontaneous decay. Also a released oxygen gas may support the fire. Because of the rising pressure in confined spaces, the container and pipeline can burst. It is necessary to know the properties of other chemicals or mixtures used or stored together. | | |
| Advice for firefighters | the fire. If possible, r allow extinguishing soil. During the fire chemical resistant/ | safe distance on the tanks to be remove them from the danger water to get into sewers, su e, wear respiratory protective protective clothing. Pers chosen assessing the prope | ous zone. Do not urface water and e equipment and onal protective | |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions | Sufficient ventilation / respiratory protection/ contact with skin, eyes prevention. |
|--|---|
| Environmental precautions | Do not pour any spilled out material to the local drains, surface water, or nature environment. |
| Methods (material) for containment and cleaning up | Eliminate the sources of fire; prevent the contact of chemical mixture with metals, reducing agents, combustible materials. Cover the drains. Absorb with liquid-binding material (chemical absorbent, diatomite, universal binders). Residues neutralize and rinse with water. It is prohibited discarding the material in the |

| According to C | Commission Regulation (EU) No. 43 | 53/ 2010 Annex I | |
|-------------------------------|---|---|---|
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| | - | ing back into the original concording to the instructions. | ntainer. Dispose |
| Reference to other sections | View sections 8 and | 13. | |
| 7. HANDLING AND STORA | GE | | |
| Precautions for safe handling | Do not store togeth and flammable ma container in the tem than (+20°C). At hi of mixture takes p assembled with gro concrete. Use com peracetic acid, an | osed original packaging in dry er with alkalis, reducing age aterials, away from direct perature not lower than (-10°C gher temperature (+60°C) the lace. Floors must be non-c ove, made of non-conductiv tainers which are officiall d made of polyethylene, ene, vinyl polichloride. All | nts, metal salts sunlight. Keep C) and not more e decomposition ombustible, no e, acid-resistan by suitable fo polypropylene |

Conditions for safe storage For the professional use only. Use only in a well ventilated area, where exhaust ventilation is equipped strictly in accordance with the instructions. Use common rules/instructions when working with chemicals. Do not mix with other chemicals. During the process do not eat, drink or smoke. Do not allow concentration of chlorine in the air to exceed allowable threshold. Use appropriate personal protective equipment as indicated in Section 8.

containers must be equipped with the mandatory holes for air removal. These holes must be checked regularly, since increasing pressure increases the risk of tanks' and containers' bursting.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters according to HN 23:2007 in Lithuania:

| Name | CAS No. | Allowable concentration |
|------------------------------|-----------|---|
| acetic acid % | 64-19-7 | IPRD= 25 mg/m ³ , 10 ppm |
| hydrogen peroxide solution % | 7722-84-1 | IPRD= 1,4 mg/m ³ , 1 ppm U NRD= 3 mg/m ³ , 2 ppm |

Notes: IPRD – long-term exposure limit value, NRD – don't exposure limit value; U - acute.

Peracetic acid not to be exceeded limit values (mg/m3 (ppm)) when effects from 10 minutes to 8 hours:

| Classification | 10 min | 30 min | 1 h | 4 h | 8 h | Consequence of exposure and references |
|----------------|-------------|--------|-----|-----|-----|---|
| AEGL-1 | 0,52 (0,17) | | | | | Limit corrosion / irritation; (Fraser and Thorbinson, 1986; McDonagh, 1997) |
| AEGL-2 | 1,6 (0,5) | | | | | Average corrosion / irritation (Fraser and Thorbinson, 1986) |
| AEGL-3 | 60 | 30 | 15 | 6,3 | 4,1 | The highest concentration, not causing deaths (Janssen, 1989a) |

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Appropriate engineering controls General, local exhaust ventilation. Avoid the spills, and any contact with this mixture, see Section 7. Avoid the spills, contact with ground and sewage system. Personal protective equipment: General protective and hygienic measures Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of the work. Avoid contact with eyes and skin. Hand and body protection Protective gloves. The material of the gloves should be resistant to the substance/ mixture, acids. Penetration time of the material check out with manufacturer. Foot protection - rubber boots. Protective, acid-resistant clothing, it is necessary rubber apron. Eye protection Wear safety glasses, face covering shields. Half masks or masks with gas filters and combined filters -Respiratory protection A2B2E2P2 complying with EN 14387, EN 12941 and EN 12942. In case of insufficient ventilation or accident - self contained breathing apparatus must be used.

Environmental impact control See sections 6 and 12.

| 9. PHYSICAL AND CHEMICAL PROPERTIES | | | | |
|--|---|--|--|--|
| Form | Liquid | | | |
| Color | Clear, colourless | | | |
| Odor | Specific (strong) | | | |
| pH, 1 %, 20-25°C | ~ 3,2 | | | |
| pH, 100 %, 20-25°C | 0,2-0,5 | | | |
| The relative density, g/cm ³ , 20°C | 1,10 – 1,16 | | | |
| Boiling point, °C | > 100 | | | |
| Flash point (closed cup), °C | 68÷ 81 | | | |
| 10. STABILITY AND REACTIVITY | | | | |
| Chemical stability | When ensured normal storage, transport and use, under normal circumstances - the mixture is stable. | | | |
| Conditions to avoid/ incompatible materials | Sunlight, heat effects. Dirt, decomposition catalysts, metal salts, alkali, reducing materials, metals, ferrous metal, aluminum, zinc, highly flammable substances, organic solvents. | | | |
| Hazardous decomposition products | Water vapors and oxygen. The risk of decomposition because of the heat effects; an exothermic reaction during the contact with | | | |

SAFETY DATA SHEET

According to Commission Regulation (EU) No. 453/ 2010 Annex I

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dirt, metal salts, alkaline reducing agents; the risk of explosion due to decomposition in closed tanks and pipes; the risk of decomposition at higher than + 60°C temperature. Also reaction products depend on the substances/mixtures involved in the chemical reactions.

| 11. TOXICOLOGICAL INFORMATI | ON | |
|---------------------------------------|---|--|
| Toxicological effects | On the basis of chemical information, it can be said that mixture is not characterized by acute toxicity when swallowed animals (rats) during the experiment. The rates do not exceed acute toxicity's estimates. | |
| Primary irritant effect | Skin: May corrode, irritate the skin. The damage depends on the exposure time and concentration. | |
| | Eyes: Irritating effects. | |
| | Inhalation: Inhalation of vapors may cause irritation / corrosion of respiratory system. | |
| | Ingestion: - | |
| Additional toxicological information: | The effect depends on the concentration and on time from one second to minute. | |
| 12. ECOLOGICAL INFORMATION | | |
| Toxicity | On the basis of chemical information, it can be said that mixture is characterized by a toxicity chronic, category 3, to aquatic organisms (fish). | |
| Persistence and degradability | On the basis of chemical information can be said that the product is biodegradable. Under ambient conditions a rapid hydrolysis takes place in a form of reduction or decomposition. During these processes oxygen, water, and acetic acid are produced; in addition an acetic acid is easily broken down biologically. | |
| Bioaccumulative potential | Not determined/ no data. | |
| Mobility in soil | Soluble in water, spread out, neutralize. Before being released into waste water or sewage system must be diluted with water or neutralized. | |
| Other adverse effects | Threat to aquatic and soil organisms can be caused by changes in local environment's pH. | |
| 13. DISPOSAL CONSIDERATIONS | | |
| Disposal of product | Waste must be managed according to the Waste Management Act. Do not dispose in the trash, local and storm sewage system, surface water or environment Waste code: 11 01 05 * pickling | |

surface water or environment. Waste code: 11 01 05 * pickling acids; 07 06 fats, grease, soaps, detergents, disinfectants and cosmetics waste; 20 municipal wastes (household waste and similar commercial, industrial and institutional wastes)

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including separately collected fractions; 20 01 14* acids 20 01 29* detergents containing hazardous substances; 20 01 30 detergents other than those mentioned in 20 01 29.

Disposal of packaging Packaging waste must be handled according to packaging and packaging waste management act. The product must be diluted with water or neutralized before released into sewage system. Washed and dried packaging can be reused or given back to packaging waste management companies. Packaging waste code 15 01 02 plastic (including PET) packaging; 15 01 10 contaminated packaging or containing dangerous chemical residues.

| 14. TRANSPORT INFORMATION | |
|------------------------------|--|
| Transport classification | Land transport ADR / RID (international/internal transportation). |
| UN number | 3109 |
| Name and description | ORGANIC PEROXIDE, TYPE F, LIQUID (stabilized) |
| Class | 5.2 organic peroxides |
| Cassification group | P1 |
| Packing group | II |
| Labels | 5.2+8 |
| Hazard identification number | 539 |
| Special precautions for user | Store separate from alkalis, metal powders and combustible materials. Do not damage packaging. Threat to the aquatic environment or the sewage system. |

15. REGULATORY INFORMATION

Information on legal regulations related to the substance / mixture:

- 1. Commission Regulation (EC) No. 286/2011; 1272/2008; 1907/2006.
- 2. Commission Regulation (EC) No. 551/2009.
- 3. HN 23:2007 "Occupational exposure limit values. Measuring the Impact Assessment and General Requirements".
- 4. European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

16. OTHER INFORMATION

Explanations of Hazard symbols and numeric characters (described in Section 3):

Org. Perox. D (****)

Organic peroxides type D (to determine the exact physical hazard classifications record of physical danger must be confirmed by

| According to Commission Regulation (EU) No. 453/ 2010 Annex I | | | | | |
|---|---|--|------------|--|--|
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| testing). | | | | | |
| Acute Tox. 4 (*) | Acute toxicity, 4 cates | Acute toxicity, 4 category (minimum classification). | | | |
| Aquatic. Acute 1 | Hazardous to the aquatic environment, acute 1 category. | | | | |
| Skin Irrit. 2 | Skin irritation category 2. | | | | |
| Eye Dam. 1 | Serious eye damage ca | Serious eye damage category 1. | | | |
| Eye Irrit. 2 | Eye irritation of categ | Eye irritation of category 2. | | | |
| H226 | Flammable liquid and | Flammable liquid and vapor. | | | |
| 11220 | Fiammable liquid and vapor. | | | | |
| H315 | Causes skin. | Causes skin. | | | |
| H318 | Causes severe eye dar | Causes severe eye damage. | | | |
| H319 | Causes severe eye irri | Causes severe eye irritation. | | | |
| H400 | Very toxic to water or | Very toxic to water organisms. | | | |
| | | | | | |

This safety data sheet must be available to anyone who works with this type of chemical product. Data is in line with our current knowledge and it describes a chemical product, offers safety, occupational health, and environmental recommendations. This information will be added if new data about this chemical product will be ready. Material Safety Data Sheet does not disclose any specific chemical characteristics of the product.