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|---------------|-------------------------------|----------------------|------------------|------------|
| Trade name: | LUGOL'S SOLUTION, ACID | | | |
| Product code: | LUGK-OT-X** | Date of compilation: | 14 November 2022 | Version: 3 |


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

| | | |
|------|---|--|
| 1.1. | Product identifier | |
| | Trade name: | LUGOL'S SOLUTION, ACID |
| | Chemical name: | - |
| | Catalogue number: | LUGK-OT-X** |
| 1.2. | Relevant identified uses of the substance or mixture and uses advised against | |
| | Uses: | Aqueous solution of iodine and potassium iodide with added acid. |
| | Uses advised against: | Only the identified uses are advised. |
| | Reason why uses advised against: | The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes. |
| 1.3. | Details of the supplier of the safety data sheet | |
| | Supplier: | BioGnost Ltd. |
| | Address: | Medjugorska 59, Zagreb |
| | Telephone number: | +385 1 2409997 |
| | Telefax: | +385 1 2404039 |
| | e-mail of competent person: | msds@biognost.hr |
| | National contact: | |
| 1.4. | Emergency telephone numbers | |
| | National Protection and Rescue Directorate: | 112 |
| | Medical information: | +385 1 2348 342 |
| | Other information: | - |

SECTION 2. Hazards identification

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|---|--|------------------------|
| 2.1. | Classification of the substance or mixture | |
| 2.1.1. | Classification according to Regulation (EC) No 1272/2008 (CLP) | |
| | Hazard class and category code: | Hazard statement*: |
| | Skin Irr. 2 | H315 |
| | Eye Irr. 2 | H319 |
| 2.1.2. | Additional information | |
| | - | |
| * For full text of Hazard- and EU Hazard-statements: see SECTION 16 | | |
| 2.2. | Label elements | |
| | Product identification: | LUGOL'S SOLUTION, ACID |
| | Identification number: | - |
| | Authorisation number: | - |

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| Hazard pictograms: |  |
| | GHS07 |
| Signal word: | Warning |
| Hazard statements: | H315 Causes skin irritation. H319 Causes serious eye irritation. |
| Precautionary statements: | P280 Wear protective gloves/protective clothing/eye/protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor. |
| Supplemental hazard information (EU): | - |
| 2.3. Other hazards | |
| | Endocrine Disrupting Properties: No known endocrine disrupting properties. |

| SECTION 3. Composition/information on ingredients | | | | |
|--|-----------------------|-----------------------------|---------------------|--|
| CAS/EC/ Index number | REACH Registration No | Weight % content (or range) | Identification name | Classification according to Regulation (EC) No 1272/2008 (CLP) |
| 64-19-7/ 200-580-7/ 607-002-00-6 | - | 8 – 9 % | acetic acid, 99% | Flam. Liq. 3; H226 Skin corr. 1A; H314 |

| SECTION 4. First aid measures | |
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| 4.1. Description of first aid measures | |
| General notes: | - |
| Following inhalation: | Carry the afflicted person out for fresh air, place them in half lying position and calm them down. If breathing stops, immediately apply artificial respiration. Rush the afflicted person to the hospital while keeping them in lateral recumbent position in order to keep the airways clear. |
| Following skin contact: | Remove contaminated clothing. Wash with plenty of water and soap for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain. |

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| | Following eye contact: | Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist. |
| | Following ingestion: | Rinse with water and expectorate. Make the afflicted person drink 1 - 2 glasses of water (200 - 400 ml). The afflicted person should drink one glass (100 ml) of 40% ethanol (adult dose). Place the afflicted person in the half lying position and rush them to hospital while constantly calming them down. If the afflicted person is vomiting, there may be risk of pulmonary aspiration. |
| | Self-protection of the first aider | Avoid direct contact with the chemical; use appropriate protective equipment described in Section 8. |

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

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| | Following inhalation: | Airways irritation and possible lung damage due to high levels of vapor concentration. Absorption may cause toxic effects. |
| | Following skin contact: | Minimum level of irritation, defatting; prolonged exposure may cause absorption and greater possibility of delayed systemic effects. |
| | Following eye contact: | Mild to moderate irritation due to vapor, conjunctivitis, later chemosis, lesser possibility of cornea damage. Visual impairments may occur later, after the absorption. |
| | Following ingestion: | Stomach and bowel irritation, feeling unwell, vomiting, strong abdominal pain. Absorption may cause toxic effects. |

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

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SECTION 5. Firefighting measures

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| 5.1. | Extinguishing media | |
| | Suitable extinguishing media: | Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam |
| | Unsuitable extinguishing media: | water jet |
| 5.2. | Special hazards arising from the substance or mixture | |
| | Hazardous byproducts of fire: | No information available |
| 5.3. | Advice for firefighters | |
| | Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray, in order to prevent explosion. | |
| 5.4. | Additional information | |
| | Remove sources of heat and ignition. Do not contaminate the environment with extinguishing media. | |

SECTION 6. Accidental release measures

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|---------------|--|--|
| 6.1. | Personal precautions, protective equipment and emergency procedures | |
| 6.1.1. | For non-emergency personnel | |

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| | Protective equipment: | Use personal protective equipment (see Section 8). |
| | Accident prevention methods: | Evacuate members of all non-essential personnel and those members without protective equipment. Do not breathe in vapor, ensure adequate ventilation and avoid contact with skin and eyes. Remove all sources of sparks and ignition. Do not smoke. |
| | Emergency procedures: | Mark the area using proper signs. |
| 6.1.2. | For emergency responders: | |
| | Use protective equipment; in case of inadequate ventilation use adequate airways protective equipment (see Section 8). | |
| 6.2. | Environmental precautions: | |
| | Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112. | |
| 6.3. | Methods and materials for containment and cleaning up | |
| 6.3.1. | Bundling, covering of drains; capping procedures: | Sand or clay barriers. |
| 6.3.2. | For cleaning: | Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and involved materials with water. |
| 6.3.3. | Other information: | Do not use tools that may cause sparks. |
| 6.4. | Reference to other sections | |
| | See Section 7 for information about secure handling. See Section 8 for information about personal protective equipment. See Section 13 for information about containment. | |

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| SECTION 7. Handling and storage | | |
| 7.1. | Precautions for safe handling | |
| 7.1.1. | Protection measures | |
| | Measures for fire prevention: | Use in well ventilated storage rooms. Keep away from sources of heat and ignition. Carry out measures for preventing static electricity. |
| | Measures for preventing spray and dust formation: | Secure proper ventilation. |
| | Environmental precautions: | Prevent spilling into the sewage system and waterways. |
| | Other measures: | - |
| 7.1.2. | Advice on general occupational hygiene: | |
| | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. | |

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| 7.2. | Conditions for safe storage, including any incompatibilities | | | |
| | Technical measures and storage conditions: | Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat, sunlight, and other incompatible substances. | | |
| | Packaging materials: | Manufacturer's original packaging. | | |
| | Requirements for storage rooms and vessels: | Keep away from food and drink. Keep the containers tightly closed. | | |
| | Advices for storage equipment: | The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation. | | |
| | Further information on storage conditions: | Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10). | | |
| 7.3. | Specific end use(s) | | | |
| | Recommendations: | - | | |
| | Industrial sector specific solutions: | - | | |

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| SECTION 8. Exposure controls/personal protection | | | | |
| 8.1. | Control parameters | | | |
| | Substance | CAS No | Occupational exposure limit values/short term values | Biological limit values |
| | | | ppm | mg/m ³ |
| | Acetic acid | 64-19-7 | 10/20 | 25/50 |
| | | | | - |
| | Substance: | - | | |
| | EC No: | - | CAS No: | - |
| DNEL | | | | |
| Industrial | | | | |
| Route of exposure: | Acute effect local | Acute effect systemic | Chronic effect local | Chronic effect systemic |
| Oral | - | - | - | - |
| Inhalation | 25 mg/m ³ (acetic acid) | - | 25 mg/m ³ (acetic acid) | - |
| Dermal | - | - | 10 mg/kg bw/d (acetic acid) | - |
| | Critical physical parameters: solubility, flammability, corrosivity: | | | - |
| Consumer | | | | |

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| Route of exposure: | Acute effect local | Acute effect systemic | Chronic effect local | Chronic effect systemic |
|--------------------|------------------------------------|-----------------------|------------------------------------|-------------------------|
| Oral | - | - | - | - |
| Inhalation | 25 mg/m ³ (acetic acid) | - | 25 mg/m ³ (acetic acid) | - |
| Dermal | - | - | - | - |

PNEC

| Environmental protection target | PNEC |
|------------------------------------|---------------------------|
| Fresh water | 3.058 mg/l (acetic acid) |
| Freshwater sediments | 11.36 mg/kg (acetic acid) |
| Marine water | 0.3058 mg/l (acetic acid) |
| Marine sediments | 1.136 mg/kg (acetic acid) |
| Food chain | No information available |
| Microorganisms in sewage treatment | 85 mg/l (acetic acid) |
| Soil (agricultural) | 0.478 mg/kg (acetic acid) |
| Air | No information available |

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| 8.2. | Exposure controls | |
| 8.2.1. | Appropriate engineering measures | |
| | Substance/mixture related measures to prevent exposure during identified uses: | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace. |
| | Structural measures to prevent exposure: | No information available |
| | Organisational measures to prevent exposure: | Organization of work in order to reduce other worker's influence during work process. |
| | Technical measures to prevent exposure: | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. |
| 8.2.2. | Personal protection equipment | |
| 8.2.2.1. | Eye and face protection: | Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU). |
| 8.2.2.2. | Skin protection: | |

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| | Hand protection: | <p>The protective gloves have to satisfy the specification of Regulation (EU) 2016/425 and the related standard EN374.</p> <p>Full contact:</p> <p style="padding-left: 40px;">Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min</p> <p>Splash contact:</p> <p style="padding-left: 40px;">Gloves material: polychloroprene Glove thickness: 0.65 mm Time until perforation: >240 min</p> |
| | Other skin protection: | Complete suit protecting against chemicals (EN 340) The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace and shoes that cover the entire foot. |
| 8.2.2.3. | Respiratory protection: | Use mask that covers the entire face (EN 136). Recommended filter type: ABEK (EN 143). Use respirators and components tested according to and approved by the standard (EU). |
| 8.2.2.4. | Thermal hazards: | No information available |
| 8.2.3. | Environmental exposure controls | |
| | Substance/mixture related measures to prevent exposure: | See Section 6 |
| | Structural measures to prevent exposure: | Use modern equipment. |
| | Organisational measures to prevent exposure: | Adapt the work process to the required working conditions of the workplace. |
| | Technical measures to prevent exposure: | See Section 6 |

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | Value | Method |
|---|---|--------------------------|
| Physical state: | liquid | No information available |
| Colour: | dark brown | No information available |
| Odour/odour threshold: | acetic acid like/no information available | No information available |
| Melting point / freezing point: | No information available | No information available |
| Boiling point or initial boiling point and boiling range: | No information available | No information available |
| Flammability: | No information available | No information available |
| Lower and upper explosion limit: | No information available | No information available |

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| | Flash point: | No information available | No information available |
| | Auto-ignition temperature: | No information available | No information available |
| | Decomposition temperature: | No information available | No information available |
| | pH: | No information available | No information available |
| | Kinematic viscosity: | No information available | No information available |
| | Solubility: | No information available | No information available |
| | Partition coefficient n-octanol/water (log value): | No information available | No information available |
| | Vapour pressure: | No information available | No information available |
| | Density and/or relative density | No information available | No information available |
| | Relative vapour density: | No information available | No information available |
| | Particle characteristics: | No information available | No information available |
| 9.2. | Other information | | |
| | - | | |

| SECTION 10.: Stability and reactivity | | |
|---------------------------------------|-------------------------------------|---|
| 10.1. | Reactivity: | See subsections 10.3 through 10.5. |
| 10.2. | Chemical stability: | The product is chemically stable under standard ambient conditions of storing and using (room temperature). |
| 10.3. | Possibility of hazardous reactions: | No information available |
| 10.4. | Conditions to avoid: | No information available |
| 10.5. | Incompatible materials: | No information available |
| 10.6. | Hazardous decomposition products: | No information available |

| SECTION 11. Toxicological information | | | | | |
|--|--------------------------|---------|---|---------------|---|
| 11.1. Information on toxicological effects | | | | | |
| Acute toxicity: | | | | | |
| Route of exposure: | Method | Species | Effective Dose LD ₅₀ /LC ₅₀ or ATE _{mixture} | Exposure time | Results |
| Oral: | No information available | rat | LD ₅₀ | - | 3.310 mg/kg (acetic acid) |
| Dermal: | No information available | rabbit | LD ₅₀ | - | 1.060 mg/kg (acetic acid) |
| Inhalation: | No information available | rat | LC ₅₀ | - | 40.000 mg/m ³ (acetic acid) |

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| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | |
|---|--|--|--|--|--|--|

| | Specific effects | Target organ | Note |
|-------------|--------------------------|--------------------------|------|
| Oral: | No information available | No information available | - |
| Dermal: | No information available | No information available | - |
| Inhalation: | No information available | No information available | - |

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| Aspiration hazard: | Irritating to respiratory system. |
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| Irritation and corrosion | | | | | | |
|--------------------------|--|--|--|--|--|--|

| | Exposure time | Species | Evaluation | Method | Note |
|-------------------------------|---------------|---------|------------|--------|------|
| Skin corrosion/irritation | - | - | - | - | - |
| Serious eye damage/irritation | - | - | - | - | - |

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| Sensitization | | | | | | |
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| Skin sensitization: | Does not cause sensitization. | | | | | |
| Respiratory sensitization: | No information available | | | | | |

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| Symptoms related to the physical, chemical and toxicological characteristics: | | | | | | |
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| Oral exposure: | Stomach and bowel irritation, feeling unwell, vomiting, strong abdominal pain. Absorption may cause toxic effects. | | | | | |
| Dermal exposure: | Minimum level of irritation, defatting; prolonged exposure may cause absorption and greater possibility of delayed systemic effects. | | | | | |
| Inhalation exposure: | Airways irritation and possible lung damage due to high levels of vapor concentration. Absorption may cause toxic effects. | | | | | |
| Eye exposure: | Mild to moderate irritation due to vapor, conjunctivitis, later chemosis, lesser possibility of cornea damage. Visual impairments may occur later, after the absorption. | | | | | |

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| Repeated dose toxicity (subacute, subchronic, chronic) | | | | | | |
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| | Dose | Exposure time | Species | Method | Evaluation | Note |
|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------|
| Subacute oral | No information available | No information available | No information available | No information available | No information available | - |

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| Subacute dermal | No information available | No information available | No information available | No information available | No information available | - |
| Subacute inhalation | No information available | No information available | No information available | No information available | No information available | - |
| Subchronic oral | No information available | No information available | No information available | No information available | No information available | - |
| Subchronic dermal | No information available | No information available | No information available | No information available | No information available | - |
| Subchronic inhalation | No information available | No information available | No information available | No information available | No information available | - |
| Chronic oral | No information available | No information available | No information available | No information available | No information available | - |
| Chronic dermal | No information available | No information available | No information available | No information available | No information available | - |
| Chronic inhalation | No information available | No information available | No information available | No information available | No information available | - |

Specific target organ toxicity - repeated exposure (STOT-RE):

| | Specific effects | Target organ | Note |
|-----------------------|--------------------------|--------------------------|------|
| Subacute oral | No information available | No information available | - |
| Subacute dermal | No information available | No information available | - |
| Subacute inhalation | No information available | No information available | - |
| Subchronic oral | No information available | No information available | - |
| Subchronic dermal | No information available | No information available | - |
| Subchronic inhalation | No information available | No information available | - |
| Chronic oral | No information available | No information available | - |
| Chronic dermal | No information available | No information available | - |
| Chronic inhalation | No information available | No information available | - |

CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)

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| Carcinogenicity: | No information available |
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| Mutagenicity <i>in-vitro</i> : | No information available |
| Genotoxicity: | No information available |
| Mutagenicity <i>in-vivo</i> : | No information available |
| Germ cell mutagenicity : | No information available |
| Reproductive toxicity: | No information available |
| | |
| Summary of evaluation of the CMR properties; : | No information available |
| | |
| 11.2. | Information on other hazards: |
| 11.2.1. | Endocrine disrupting properties: |
| | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| 11.2.2. | Other information: |
| | - |

| SECTION 12. Ecological information | | | | | | |
|---|------------------|---------------|-------------------------------------|--------------------------|--------------------------|---------------------------|
| 12.1. Toxicity | | | | | | |
| Acute (short-term) toxicity | Dose | Exposure time | Species | Method | Evaluation | Note |
| Fish | LC ₅₀ | 96 hours | Oncorhynchus mykiss (rainbow trout) | No information available | No information available | 1.000 mg/l (acetic acid) |
| Crustacea: | EC ₅₀ | 48 hours | Daphnia magna | No information available | No information available | >1.000 mg/l (acetic acid) |
| Algae/aquatic plants: | IC ₅₀ | 8 days | algae | No information available | No information available | >1.000 mg/l (acetic acid) |
| Other organisms | - | - | - | - | - | - |
| Chronic (long-term) toxicity | Dose | Exposure time | Species | Method | Evaluation | Note |
| Fish | LC ₅₀ | 96 hours | No information available | No information available | No information available | - |
| Crustacea: | EC ₅₀ | 48 hours | No information available | No information available | No information available | - |

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| Algae/aquatic plants: | IC ₅₀ | 72 hours | No information available | No information available | No information available | - |
| Other organisms | - | - | - | - | - | - |

12.2. Persistence and degradability

| | | | | |
|---------------------|--------------------------|--------------------------|--------------------------|------|
| Abiotic degradation | | | | |
| | Degradation half-lives | Method | Evaluation | Note |
| Marine water | No information available | No information available | No information available | - |
| Fresh water | No information available | No information available | No information available | - |
| Air | No information available | No information available | No information available | - |
| Soil | No information available | No information available | No information available | - |

Biodegradation

| | | | | |
|---------------|-------------|--------------------------|--------------------------|------|
| % Degradation | Time (days) | Method | Evaluation | Note |
| - | - | No information available | No information available | - |
| | | | | |

12.3. Bioaccumulative potential

| | | | | | | |
|--|--------------------------|----|----|--------|--------------------------|------|
| Octanol-water partition coefficient (log K _{ow}) | | | | | | |
| Value | Concentration | pH | °C | Method | Evaluation | Note |
| - | No information available | - | - | - | No information available | - |
| | | | | | | |

Bioconcentration Factor (BCF)

| | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Value | Species | Method | Evaluation | Note |
| No information available | No information available | No information available | No information available | No information available |
| | | | | |

Chronic ecotoxicity

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| Value | Dose | Exposure time | Species | Method | Evaluation | Note |
|---|------------------|--------------------------|--------------------------|--------------------------|--------------------------|------|
| Chronic toxicity on fish | LC ₅₀ | No information available | No information available | No information available | No information available | - |
| Chronic toxicity on crustacea (Daphnia) | EC ₅₀ | No information available | No information available | No information available | No information available | - |

12.4. Mobility in soil

| | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|------|
| Known or predicted distribution in environmental compartments: | | | | | |
| No information available | | | | | |
| Surface tension: | | | | | |
| | Value | °C | Concentration | Method | Note |
| | No information available | No information available | No information available | No information available | - |

Adsorption / desorption

| Transport | A/D coefficient Henry's constant | log Kow | Evaporation rate | Method | Note |
|------------|-------------------------------------|--------------------------|--------------------------|--------------------------|------|
| Soil-Water | No information available | No information available | No information available | No information available | - |
| Water-Air | No information available | No information available | No information available | No information available | - |
| Soil-Air | No information available | No information available | No information available | No information available | - |

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties

No known endocrine disrupting properties that affect the environment.

12.7. Other adverse effects

No information available

| | | | | |
|---------------|-------------------------------|----------------------|------------------|------------|
| Trade name: | LUGOL'S SOLUTION, ACID | | | |
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| | |
|--|--|
| SECTION 13. Disposal considerations | |
|--|--|

| | |
|-------|-------------------------|
| 13.1. | Waste treatment methods |
|-------|-------------------------|

| | |
|---------|--|
| 13.1.1. | Product/Packaging disposal: |
| | Waste material must be disposed of according to the national and local rules and regulations. Do not mix with other sorts of waste. Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. |

| | |
|---------|--|
| 13.1.2. | Waste codes/waste designations according to Law: |
| | No information available |

| | |
|---------|---|
| 13.1.3. | Waste codes/waste designations according to Low: |
| | 15 01 10*: packaging that contains residual hazardous substances or is contaminated with hazardous substances |

| | |
|---------|---|
| 13.1.4. | Sewage disposal – relevant information: |
| | Waste must not be disposed of into the sewage system. |

| | |
|---------|---|
| 13.1.5. | Other disposal recommendations: |
| | Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur. |

| | |
|---------|---|
| 13.1.6. | Relevant Community provisions: |
| | Directive 2009/98/EC on waste and repealing certain directives. |

| | |
|--|--|
| SECTION 14. Transport information | |
|--|--|

| | |
|--|-------------------------------------|
| | Transporting/shipment by road (ADR) |
|--|-------------------------------------|

| | |
|-------------------------------|--------------------------------------|
| UN number: | Not subject to transport regulations |
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmental hazards: | - |
| Special precautions for user: | - |

| | |
|--|-------------------------------------|
| | Transporting/shipment by rail (RID) |
|--|-------------------------------------|

| | |
|------------|--------------------------------------|
| UN number: | Not subject to transport regulations |
|------------|--------------------------------------|

| | | | | | |
|---------------|-------------------------------|----------------------|------------------|----------|---|
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| | |
|-------------------------------|---|
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmental hazards: | - |
| Special precautions for user: | - |

Transporting/shipment by inland waterways (ADN)

| | |
|-------------------------------|--------------------------------------|
| UN number: | Not subject to transport regulations |
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmental hazards: | - |
| Special precautions for user: | - |

Transporting/shipment by sea (IMDG)

| | |
|--|--------------------------------------|
| UN number: | Not subject to transport regulations |
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmental hazards: | - |
| Special precautions for user: | - |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: | - |

Transporting/shipment by air (ICAO-TI/IATA-DGR)

| | |
|-------------------------------|--------------------------------------|
| UN number: | Not subject to transport regulations |
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmental hazards: | - |
| Special precautions for user: | - |

| | |
|----------------------|---|
| Further information: | - |
|----------------------|---|

SECTION 15. Regulatory information

| | |
|-------|--|
| 15.1. | Safety, health and environmental regulations/legislation specific for the substance or mixture |
| | EU regulations |
| | Authorisations and/or restrictions on use |
| | Authorisations: - |

| | | | | | |
|---------------|-------------------------------|----------------------|------------------|----------|---|
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| | | | | | |
|--|--|--|--|--|--|
| Restrictions: | - | | | | |
| Other EU regulations: | <p>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), establishing a 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;</p> <p>Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;</p> <p>Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;</p> <p>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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;</p> <p>REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);</p> | | | | |
| Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline) | | | | | |
| National legislation: | <p>Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act</p> | | | | |
| 15.2. | Chemical safety assessment | | | | |
| | None | | | | |

| SECTION 16. Other information | | |
|--------------------------------------|---|---|
| 16.1. | Indication of changes: | - |
| 16.2. | Abbreviations and acronyms: | <p>ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)</p> <p>IMDG: International Maritime Code for Dangerous Goods</p> <p>IATA: International Air Transport Association</p> <p>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</p> <p>EINECS: European Inventory of Existing Commercial Chemical Substances</p> <p>CAS: Chemical Abstracts Service (division of the American Chemical Society)</p> <p>DNEL: Derived No-Effect Level (UK REACH)</p> <p>LC50: Lethal concentration, 50 percent</p> <p>LD50: Lethal dose, 50 percent</p> <p>PBT: Persistent, Bioaccumulative and Toxic</p> <p>vPvB: very Persistent and very Bioaccumulative</p> |
| 16.3. | Key literature references and source of data: | - |

| | | | | | |
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| | | |
|-------|---|--|
| 16.4. | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) | |
| | Classification | Classification procedure |
| | - | - |
| 16.5. | Relevant H statements (number and full text) | |
| | H: H226 | Flammable liquid and vapour. |
| | H: H314 | Causes severe skin burns and eye damage. |
| | H: H315 | Causes skin irritation. |
| | H: H319 | Causes serious eye irritation. |
| 16.6. | Training advice: | |
| | | - |
| 16.7. | Further information: | |
| | | ** "X" in the product code marks different volumes (different packaging of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet. |

ANNEX: Exposure scenario resulting to Chemical safety assessment

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