

ALCIAN BLUE pH 2.5 KIT

VERSION 3

The kit contains:

Alcian Blue solution pH 2.5 Nuclear Fast Red (Kernechtrot) reagent Sodium tetraborate, solution



According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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| Trading name: | ALCIAN BLUE SOLUTION pH 2.5 | | | | | |
|---------------|-----------------------------|----------------------|-----------------|----------|---|--|
| Product code: | AB2-OT-X** | Date of compilation: | 07 October 2024 | Version: | 7 | |

| 1.1. | Product identifier | | | | |
|------|--|----------------------------|---|---|--|
| | Trading name: | ALCIA | CIAN BLUE SOLUTION pH 2.5 | | |
| | Chemical name: | - | | | |
| | Catalogue number: | AB2-C | T-X** | | |
| 1.2. | Relevant identified us | es of the | substance or mi | xture and uses advised against | |
| | Uses: | | For staining ac | cid mucopolysaccharides of intestinal goblet cells. | |
| | Uses advised against: | | Only the ident | ified 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 | | |
| | Fax no.: | | +385 1 2404039 | | |
| | e-mail of competent | person: | msds@biognost.hr | | |
| | National contact: | | - | | |
| 1.4. | Emergency telephone | Emergency telephone number | | | |
| | National Protection a | nd Rescu | e Directorate: | 112 | |
| | Medical information: | | | +385 1 2348 342 | |
| | Other information: | | | - | |

| SECTIO | SECTION 2. Hazards identification | | | | | | |
|---------|--|----------------|-----------------|--|--|--|--|
| 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 statements*: | | | | | | |
| | Not identified as hazardous substa | ance. | - | | | | |
| 2.1.2. | Additional information | | | | | | |
| | - | | | | | | |
| *For fu | ll text of Hazard- and EU Hazard-sta | tements: see S | ection 16 | | | | |
| 2.2. | Label elements | | | | | | |
| | Product identification: | ALCIAN BLUE | SOLUTION pH 2.5 | | | | |
| | Identification number: | _ | | | | | |
| | Authorization no.: | _ | | | | | |
| | Hazard pictograms: | - | | | | | |



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| | Signal word: | | | |
|------|--|--|--|--|
| | Hazard statements: - | | | |
| | Precautionary statements: - | | | |
| | Further information: - | | | |
| 2.3. | . Other hazards | | | |
| | Endocrine Disrupting Properties: | | | |
| | No known endocrine disrupting properties | | | |
| | Results of PBT and vPvB assessment : According to the results of its assessment, this substance is not a PBT or a vPvB. | | | |

| SECTION 3. Composition/information on ingredients | | | | | | | |
|---|--------------------------|--------------------------------|---------------------|--|--|--|--|
| CAS/ EC/ Index no. | 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 | - | ≤ 3% | Acetic acid, 99.5% | Flam. Liq. 3; H226 Skin Corr. 1 A; H314 | | | |

| SECTI | ON 4. First aid measures | | | |
|-------|---|---------|--|--|
| 4.1. | Description of first aid mea | sures | | |
| | General notes: | | - | |
| | Following inhalation: | | No information available | |
| | Following skin contact: | | No information available | |
| | Following eye contact: Following ingestion: | | No information available | |
| | | | No information available | |
| | Self-protection of the first | aider: | Treat symptomatically. | |
| 4.2. | Most important symptoms | and eff | fects, both acute and delayed | |
| | Following inhalation: | No i | nformation available | |
| | Following skin contact: | No i | nformation available | |
| | Following eye contact: | No i | nformation available | |
| | Following ingestion: | No i | No information available | |
| 4.3. | Indication of any immediat | e medi | cal attention and special treatment needed | |
| | - | | | |

| SECTI | ON 5 Firefighting measures |
|-------|----------------------------|
| 5.1. | Extinguishing media |



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| | 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 combustion products: | 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 or vapor. | | | |
| 5.4. | Additional information | | | |
| | Remove sources of heat and igniti Do not contaminate the environm | | | |

| SECTIO | ON 6. Accidental release meas | ures | | |
|--------|---|---|--|--|
| 6.1. | Personal precautions, protect | ive equipment and emergency procedures | | |
| 6.1.1. | For non-emergency personne | el | | |
| | 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. Remove all sources of sparks and ignition. Do not smoke. | | |
| | Emergency procedures: | Mark the area using proper signs. | | |
| 6.1.2. | For emergency responders: | | | |
| | Wear 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 material for cor | Methods and material for containment and cleaning up | | |
| 6.3.1. | Bunding, covering of drains; capping procedures: | Sand or clay barriers. | | |
| 6.3.2. | Cleaning up: | 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 and involved materials with water. | | |
| 6.3.3. | Other information: | - | | |
| 6.4. | Reference to other sections | | | |



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See Section 7 for information about secure handling.

See Section 8 for information about personal protective equipment.

See Section 13 for information about containment.

| SECTIO | ON 7. Handling and storage | | | | | |
|--------|--|---|--|--|--|--|
| 7.1. | Precautions for safe handling | | | | | |
| 7.1.1. | . Protection measures | | | | | |
| | Measures to prevent fire: | Keep away from sources of heat and ignition. Do not smoke. | | | | |
| | Measures to prevent aerosol and dust generation: | Secure proper ventilation. | | | | |
| | Measures to protect the environment: Other measures: | Prevent spilling into the sewage system and waterways. | | | | |
| 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. | | | | | |
| 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 9). | | | | |
| 7.3. | Specific end use(s) | | | | | |
| | Recommendations: | - | | | | |
| | Industrial sector specific solutions: | - | | | | |

| SECTIO | SECTION 8. Exposure controls/personal protection | | | | | | | | |
|-----------|--|--------|---------------------------|-------------------------------|-------------------------|--|--|--|--|
| 8.1. | Control parameters | | | | | | | | |
| Substance | | CAS No | Occupational values/short | exposure limit term values | Biological limit values | | | | |
| | | | ppm | mg/m³ | - | | | | |



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| | | | | | | | | | | |
| - | | | - | | | - | | - | No informa | ation available |
| 6.1. | 1 1 1 1 1 | | | | | | | | | |
| Substance name: | _ | | | | | | | | | |
| EC No: | - | | CAS No: | - | | | | | | |
| DNEL | | | | | | | | | | |
| | | | | | Inc | dustrial | | | | |
| Route of | | l A | Acute | | Acut | e | | Chro | nic | Chronic |
| exposure: | | effe | ect local | e ⁻ | ffect sys | temic | | effect l | ocal | effect systemic |
| Oral | | - | | - | | | - | | | - |
| Inhalation | | - | | - | | | - | | | - |
| Dermal | | - | | - | | | - | | | - |
| Critical physical parameters: solubility, flammability, corrosivity: | | | | | | | | | | |
| | | | | | Co | nsumer | | | | |
| Route of Acu | | Acute | Acute | | e | Chronic | | nic | Chronic | |
| exposure: | | effe | ect local | effect syste | | temic | effect local | | ocal | effect systemic |
| Oral | | - | | - | | | - | | | - |
| Inhalation | | - | | - | | | - | | | - |
| Dermal | | - | | - | | | - | | | - |
| PNEC | | | | | | | | | | |
| Environmen | tal prote | ction tar | get | | | PNEC | | | | |
| Fresh water | | | | | | No infor | mation | availabl | e | |
| Freshwater | sediment | ts | | | | No information available | | | | |
| Marine wate | er | | | | | No information available | | | | |
| Marine sedi | ments | | | | | No infor | mation | availabl | e | |
| Food chain | | | | | | No information available | | | | |
| Microorgan | isms in s | ewage tr | eatment | | | No information available | | | | |
| Soil (agricul | tural) | | | | | No information available | | | | |
| Air | | | | | | No information available | | | | |
| | | | | | | | | | | |
| 8.2. | Exposur | e contro | ls | | | | | | | |
| 8.2.1. | Approp | riate eng | ineering cor | ntrols | | | | | | |
| | measur | nce/mixture related res to prevent exposure identified uses: Use the product in well ventilated rooms. Use personal protection equipment. Do not eat, drink or smoke in the workspace. | | | | · | | | | |
| | Structur | | ires to preve | ent | No info | rmation av | /ailable | 2 | | |



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| | Organisational measures prevent exposure: | to | Organization of work in order to reduce other worker's influence during work process. | | | | |
|----------|--|----------|--|--|--|--|--|
| | Technical measures to prexposure: | event | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. | | | | |
| 8.2.2. | Personal protection equi | pment | | | | | |
| 8.2.2.1. | Eye and face protection: | | Safety glasses that stick to face (preventing splashing) (EN 166) or visor. | | | | |
| 8.2.2.2. | Skin protection | | | | | | |
| | | | tive gloves must be according to the EU Directive 2016/425/EEC and ard EN 374. | | | | |
| | Hand protection: | | Glove material: nitrile rubber | | | | |
| | | | Glove thickness: ≥0.50 mm | | | | |
| | | | Break through time: >480 min | | | | |
| | Other skin protection: | | antistatic clothing made of natural fibers (such as cotton) with long s (EN 13034), and shoes that cover the entire foot (EN 10335). | | | | |
| 8.2.2.3. | Respiratory protection: | filter f | tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN) used when concentration levels exceed GVI. | | | | |
| 8.2.2.4. | Thermal hazards: | No inf | ormation available | | | | |
| 8.2.3. | Environmental exposure controls | | | | | | |
| | Substance/mixture relate measures to prevent exp | | See Section 6 | | | | |
| | Structural measures to prevent exposure: | | Use modern equipment. | | | | |
| | Organisational measures prevent exposure: | to | Adapt the work process to the required working conditions of the workplace. | | | | |
| | Technical measures to prevent exposure: | | See Section 6 | | | | |

| SECTI | SECTION 9. Physical and chemical properties | | | | | | |
|-------|---|---|--------------------------|--|--|--|--|
| 9.1. | Information on basic physical and chemical properties | | | | | | |
| | | Value | Method | | | | |
| | Physical state: | liquid | No information available | | | | |
| | Colour: | blue | 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 | | | | |



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| | Flammability: | No information available | No information available |
|------|--|--------------------------|--------------------------|
| | Lower and upper explosion limit: | No information available | No information available |
| | 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: | 2.45 -2.55 | 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 | | |
| | - | | |

| SECTIO | 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. | | | | |
| 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 toxic | Acute toxicity: | | | | | | | |
| Route of exposure: | Method | Species | Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture} | Exposure time | Results | | | |
| Oral exposure: | No information available | - | LD ₅₀ | _ | - | | | |
| Dermal exposure: | No information available | _ | LD ₅₀ | _ | - | | | |



SAFETY DATA SHEET ording to Regulation (EC) No. 1907/20

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| | : | : | | : | : | : |
| Inhalation | No informatio | n _ | | LC ₅₀ | _ | - |
| exposure: | available | | | | | |
| i | | | | | | |
| Specific | target organ toxicit | <u> </u> | osure (STOT SE): | | | |
| | • | cific effects | | Target organ | | Note |
| Oral exposure: | No informa | ation available | No infor | mation availab | ole - | |
| Dermal exposure: | No informa | ation available | No infor | mation availab | ole - | |
| Inhalation exposu | ıre: No informa | ation available | No infor | mation availab | ole - | |
| | | | | | | |
| Respirat | ory irritation: | N | o information a | vailable | | |
| | | | | | | |
| Irritation | and corrosion | | | | | |
| | Exposure time | e Specie | es Eva | aluation | Method | Note |
| Skin irritation: | - | - | - | | | |
| Eye irritation: | - | - | - | | | |
| | | | | | | |
| Sensitiza | ition | | | | | |
| Dermal exposure: | No information | available | | | | |
| Inhalation | No information | availahle | | | | |
| exposure: | NO IIIIOIIIIatioii | available | | | | |
| | | | | | | |
| Symptor | ns related to the pl | nysical, chemic | al and toxicolog | ical character | istics | |
| Oral exposure: | No information | available | | | | |
| Dermal exposure | No information | available | | | | |
| Inhalation exposure: | No information | available | | | | |
| Eye exposure: | No information | available | | | | |
| | • | | | | | |
| Repeate | d dose toxicity (sub | acute, subchro | onic, chronic) | | | |
| | Dose | Exposure time | Species | Method | Evaluation | Note |
| Subacute oral | No information available | No information available | No information available | No informatio n available | No informat available | ion _ |
| Subacute dermal | No information available | No information available | No information available | No informatio n available | No informat available | ion ₋ |



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| Subacute inhalation | No information available | No information available | No information available | No informatio n available | No information available | - |
|-----------------------|--------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------|---|
| Subchronic oral | No information available | No information available | No information available | No informatio n available | No information available | - |
| Subchronic dermal | No information available | No information available | No information available | No informatio n available | No information available | - |
| Subchronic inhalation | No information available | No information available | No information available | No informatio n available | No information available | - |
| Chronic oral | No information available | No information available | No information available | No informatio n available | No information available | - |
| Chronic dermal | No information available | No information available | No information available | No informatio n available | No information available | _ |
| Chronic inhalation | No information available | No information available | No information available | No informatio n available | No information available | - |

| | 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 (carcinogenici | CMR effects (carcinogenicity, mutagenicity, reproductive toxicity) | | | | | | |
|----------------------------|--|--|--|--|--|--|--|
| Carcinogenicity: | No information available | | | | | | |
| Mutagenicity in-vitro: | No information available | | | | | | |
| Genotoxicity: | No information available | | | | | | |
| Mutagenicity in-vivo: | No information available | | | | | | |



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| | Germ cell mutagenicity: | No information available | | | | |
|---------|---|---|--|--|--|--|
| | Reproductive toxicity: | No information available | | | | |
| | | | | | | |
| | Summary of evaluation of the CMR properties: - | | | | | |
| | | | | | | |
| 11.2 | Information on other hazards: | | | | | |
| 11.2.1. | Endocrine disrupting properties: | | | | | |
| | The substance/mixture does not components considered to endocrine disrupting proaccording to REACH Article 5 Commission Delegated regulation 2017/2100 or Commission Reg (EU) 2018/605 at levels of 0 higher. | have operties 57(f) or on (EU) gulation | | | | |
| 11.2.2. | Other information: | | | | | |
| | - | | | | | |

| SECTION 12. Eco | SECTION 12. Ecological information | | | | | | | | | |
|-------------------------|------------------------------------|------------------|--------------------------|--------------------------------|------------|------|--|--|--|--|
| 12.1. Toxicity | | | | | | | | | | |
| Acute toxicity | Dose | Exposure time | Species | Method | Evaluation | Note | | | | |
| Fish | LC ₅₀ | 96 hours | No information available | No information available | - | - | | | | |
| Crustacea: | EC ₅₀ | 48 hours | No information available | No information available | - | - | | | | |
| Algae/aquatic plants | IC ₅₀ | 8 days | No information available | No information available | - | - | | | | |
| Microorganisms | LC ₅₀ | 72 hours | - | - | - | - | | | | |
| Chronic toxicity | Dose | Exposure time | Species | Method | Evaluation | Note | | | | |
| Fish | LC ₅₀ | 96 hours | No information available | No information available | - | - | | | | |
| Crustacea: | EC ₅₀ | 48 hours | No information available | No information available | - | - | | | | |



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| | | | | | | | : | | : | | : | |
| Algae/aquatic plants | | IC ₅₀ | 72 hours | | No information ir | | No nformation vailable | | | | | |
| Other organis | sms | - | - | | - | - | | - | | | - | |
| | | | | | | | | | | | | |
| 12.2. Persi | stence | e and degradal | oility | | | | | | | | | |
| Abio | tic de | gradation | | | | | | | | | | |
| | D | egradation hal | f-lives | | Method | | E | Evaluati | on | | | Note |
| Marine water | | | | | o information avail | able | No inform | ation av | /ailab | ole | - | |
| Fresh water | No | o information available N | | | lo information available | | No inform | ation av | /ailab | ole | - | |
| Air | No information available N | | | No | o information avail | able | No inform | ation av | /ailab | ole | - | |
| Soil | No information available N | | | | o information avail | able | No inform | ation av | /ailab | ole | - | |
| | 1 | | | | | | • | | | | | |
| Biode | egrad | ation | | | | | | | | | | |
| % Degradation Time (days) | | | | Method | | Evaluation | n | | 1 | Vote | <u> </u> | |
| | | | mation | | | | | | | No information available | | |
| | | | | | | | | | | | | |
| | | ulative potentia oefficient: n-oc | | vater (| log Kow): | | | | | | | |
| | tion c | • | | | log Kow): C Method | | Evalua | ition | | | Not | te |
| Partit Value | tion c | oefficient: n-oc | tanol/v | | | on | Evalua No informavailable | | _ | | Not | te |
| Partit Value | tion co Cor No | oefficient: n-oc | tanol/v | | C Method No informati | on | No inform | | _ | | Not | te |
| Value - | Cor No availa | oefficient: n-oc | tanol/v pH - | | C Method No informati | on | No inform | | - | | Not | te |
| Partit Value | Cor No availa | oefficient: n-oc ncentration information able | tanol/v pH - | | C Method No informati | on | No inform | ation | - | | Not | |
| Partit Value - Biocc | Cor No availa | oefficient: n-ocentration information ible tration factor (l | pH - BCF) | - | C Method No informati available Method formation | No | No informavailable | ation on | | lo infoi | Not | te |
| Partit Value - Bioco Value No informatio | Cor No availa | oefficient: n-ocentration information ible tration factor (I Species No inform | pH - BCF) | - No in | C Method No informati available Method formation | No | No informavailable Evaluation information | ation on | | | Not | te |
| Partit Value - Bioco Value No informatio | Cor No availa | oefficient: n-ocentration information ible tration factor (I Species No inform | pH - BCF) | - No in | C Method No informati available Method formation | No | No informavailable Evaluation information | ation on | | | Not | te |



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| Trading name: | | ALCIAN BLUE SOLUTION pH 2.5 | | | | | | |
|---------------|------------|-----------------------------|-----------------|----------|---|--|--|--|
| Product code: | AB2-OT-X** | Date of compilation: | 07 October 2024 | Version: | 7 | | | |

| mading ii | arric. | | | 710 | 1711 | JLUL J | OEO HOIT P | '11 E.J | | |
|--|---|------------------|----------------------------|--------------------------------|----------------|---------------------------------------|--------------------|-------------------------------|--------|-------|
| Product c | ode: | AB2- | OT-X** | Date | of co | mpilati | on: 07 Oc | tober 2024 | Versi | on: 7 |
| , | /alue | | Dose | Exposure time | Spe | ecies | Method | Evalua | ation | Note |
| Chronic to | Chronic toxicity on fish LC ₅₀ | | LC ₅₀ | No information available | | No No information available available | | No informavailable | mation | - |
| Chronic toxicity on crustacea (<i>Daphnia</i>) | | EC ₅₀ | | No inforr availa | mation able | No information available | No informavailable | mation | - | |
| 12.4. M | lobility in | , soil | | | | | | | | |
| | lobility in | | ed distributi | on in environme | ental c | ompart | ments: | | | |
| | o inform | • | | | -iitai C | Jorripart | | | | |
| | urface te | | | | | | | | | |
| | Value | | °C | Concentration Method | | | | | | Note |
| | o formatio ⁄ailable | | o formation railable | No information available | | No information available | | | - | |
| A | dsorption | n / desc | orption | | | | | | | |
| Transport | A | /D coe | fficient constant | log Kow | | Evapora | ation rate | Method | | Note |
| Soil-water | No availa | · | | | | No information available | | No informatio available | | |
| Water-air | No availa | | nformation | No information available | | o inform ailable | nation | No informatio available | n - | |
| Soil-air | No availa | | nformation | No information | | o inform | nation | No informatio | n - | |

12.5. Results of PBT and vPvB assessment

available

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.

available

available

available

12.6. Endocrine disrupting properties



Trading name:

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ALCIAN BLUE SOLUTION pH 2.5

amended by Regulation (EU) No. 1907/2006

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| Produc | ct code: | AB2-OT-X** | Date of compilation: 07 October 2024 Ver | rsion: 7 |
|---------|--------------------|--------------------------------|---|----------------|
| | according | to REACH Article 57 | ot contain components considered to have endocrine disru (f) or Commission Delegated regulation (EU) 2017/2100 or over the control of the con | |
| 12.7. | Other adv | verse effects | | |
| | No inform | nation available | | |
| | | | | |
| SECTIO | N 13. Disp | oosal considerations | | |
| 13.1. | Waste t | reatment methods | | |
| 12.1.1 | D J | t (De also sin so dian e e ele | | |
| 13.1.1. | | • | gal person authorized by the Ministry of Environmental and | Nature |
| | | | | |
| 13.1.2. | | 3 | ions according to Law: | |
| | NO INTO | rmation available | | |
| 13.1.3. | Waste t | reatment – relevant i | nformation: | |
| | No info | rmation available | | |
| | | | | |
| 13.1.4. | Sewage | e disposal – relevant ir | nformation: | |
| | Waste i | nust not be disposed | of into the sewage system. | |
| | | | | |
| 13.1.5. | | lisposal recommenda | | |
| | authori the pac | zed by the ministry in | ct's remains into the sewage system. Submit the remains to charge. Do not dispose of the packaging into the sewage sors authorized by the ministry in charge. Do not dispose of | system. Submit |
| 13.1.6. | Relevar | nt Community provision | ons: | |
| | _ | | | |
| | | | | |
| SECTIO | | nsport information | J (ADD) | |
| UN nur | | ting/shipment by road | Not subject to transport regulations. | |
| | per shippir | ng name: | - | |
| ····· | ort hazard | | - | |
| | g group: | | - | |
| | - | | | |



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| Trading name: | ALCIAN BLUE SOLUTION pH 2.5 | | | | | | |
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| | | | | | | | |
| Environmentally ha | | - | | | | | |
| Special precaution | s for user: | - | | | | | |
| Transport | ing/shipment by rai | l (RID) | | | | | |
| UN number: | | No | t subject to transport regu | llations. | | | |
| UN proper shippin | ig name: | - | | | | | |
| Transport hazard o | class(es): | - | | | | | |
| Packing group: | | - | | | | | |
| Environmentally ha | azardous: | - | | | | | |
| Special precaution | s for user: | - | | | | | |
| Inland wa | terway transport (Al | ON) | | | | | |
| UN number: | | No | t subject to transport regu | lations. | | | |
| UN proper shippin | ig name: | - | | | | | |
| Transport hazard o | class(es): | - | | | | | |
| Packing group: | | - | | | | | |
| Environmentally ha | azardous: | - | | | | | |
| Special precaution | s for user: | - | | | | | |
| Transport | ing/shipment by sea | a (IMDG |) | | | | |
| UN number: | | No | t subject to transport regu | llations. | | | |
| UN proper shippin | ıg name: | - | | | | | |
| Transport hazard o | class(es): | - | | | | | |
| Packing group: | | - | | | | | |
| Environmentally ha | azardous: | - | | | | | |
| Special precaution | s for user: | - | | | | | |
| Transport | ing/shipment by air | (ICAO- | TI/IATA-DGR) | | | | |
| UN number: | | No | t subject to transport regu | lations. | | | |
| UN proper shippin | ig name: | - | | | | | |
| Transport hazard o | class(es): | - | | | | | |
| Packing group: | | - | | | | | |
| Environmentally ha | azardous: | - | | | | | |
| Special precaution | s for user: | - | | | | | |

SECTION 15. Regulatory information

Further information:

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



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| Trading name: | ALCIAN BLUE SOLUTION pH 2.5 | | | | | | |
|---------------|-----------------------------|----------------------|-----------------|----------|---|--|--|
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| | EU regulations | |
|-------|-------------------------------------|---|
| | Authorization and/or rest | rictions of use |
| | Authorizations: | - |
| | Restrictions: | - |
| | Other EU regulations: | 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; 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; 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; 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; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); |
| | Information according 19 guideline) | 99/13/EC about limitation of emissions of volatile organic compounds (VOC- |
| | National legislation: | 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 |
| 15.2. | Chemical safety assessme | ent |
| | None | |

| SECTION 16. Other information | | |
|-------------------------------|--|--|
| 16.1. Indication of changes: | | |



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|---------------|-----------------------------|----------------------|-----------------|----------|---|
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| 16.2. Abbreviations and acronyms: | | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative | | |
|-----------------------------------|---|---|--|--|
| 16.3. | Key literature references and source of data: | - | | |
| 16.4. | Classification and procedure 1272/2008 (CLP) | used to derive the classification for mixture according to Regulation (EC) | | |
| Classifi | cation | Classification procedure | | |
| - | | - | | |
| 16.5. | Relevant H statements (numb | per and full text) | | |
| | H: 226 | Flamamble liquid and vapour. | | |
| | 314 | Causes severe skin burns and eye damage. | | |
| 16.6. | Training advice: | - | | |
| 16.7. | Further information: | ** "X" in the product code marks different volumes (different packagings 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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| Trade name: | | Г | | |
|---------------|-----------|----------------------|------------------|------------|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |

| 1.1. | Product identifier | | | | | |
|------|--|---|--|---|--|--|
| | Trade name: | NUCLEAR F | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | |
| | Chemical name: | - | - | | | |
| | Catalogue number: | KR-OT-X** | KR-OT-X** | | | |
| 1.2. | Relevant identified us | Relevant identified uses of the substance or mixture and uses advised against | | | | |
| | Uses: | | Count | erstain in many special staining kits. | | |
| | Uses advised against: | | Only t | he identified uses are advised. | | |
| | Reason why uses advised against: | | medic | The product is intended for use only as an <i>in vitro</i> diagnostic medical device and there is no reason to use it for other purposes. | | |
| 1.3. | Details of the supplier of the safety data sheet | | | | | |
| | Supplier: BioG | | ioGnost Ltd | nost Ltd. | | |
| | Address: Med | | ledjugorska | ljugorska 59, Zagreb | | |
| | Telephone number: +385 | | 385 1 2409 | 5 1 2409997 | | |
| | Telefax: | Telefax: +385 | | 5 1 2404039 | | |
| | e-mail of competent p | mpetent person: <u>msds</u> | | s@biognost.hr | | |
| | National contact: | - | | | | |
| 1.4. | Emergency telephone number | | | | | |
| | National Protection a | nd Rescue Dir | ectorate: | 112 | | |
| | Medical information: | | | +385 1 2348 342 | | |
| | Other information: | | | - | | |

| SECTIO | SECTION 2. Hazards identification | | | | | | |
|----------|--|--|--|--|--|--|--|
| 2.1. | Classification of the substance or mixture | | | | | | |
| 2.1.1. | Classification according to Regulation (EC) No 1272/2008 (CLP) | | | | | | |
| | Hazard class and catego | ry code: Hazard statement*: | | | | | |
| | Not identified as hazardous subs | stance | | | | | |
| 2.1.2. | Additional information | | | | | | |
| | - | | | | | | |
| * For fu | ıll text of Hazard- and EU Hazard-s | tatements: see SECTION 16 | | | | | |
| 2.2. | Label elements | | | | | | |
| | Product identification: | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | | | |
| | Identification number: - | | | | | | |
| | Authorisation number: | Authorisation number: - | | | | | |
| | Hazard pictograms: | - | | | | | |



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| Trade name: | | Γ | | |
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| | Signal word: | - |
|------|-------------------------------------|---------|
| | Hazard statement: | - |
| | Precautionary statements: | - |
| | Supplemetal hazard information (EU) | - |
| 2.3. | Other hazards | |
| | Endocrine Disrupting Properties: | |
| | No known endocrine disrupting prop | erties. |

| SECTION 3. Com | 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) | | | |
| 6409-77-4/ 229-088-0/ - | - | ≤ 1% | Disodium 1-amino-2,4- dihydroxy-9,10-dihydro- 9,10-dioxoanthracene-3- sulphonate | | | | |

| SECTI | ON 4. First aid measures | | | | |
|-------|-------------------------------------|---|--|--|--|
| 4.1. | Description of first aid meas | sures | | | |
| | General notes: | - | | | |
| | Following inhalation: | Remove person to fresh air. If breathing stops, immediately apply artificial respiration. If breathing difficulties occur, use emergency breathing apparatus. If the symptoms persist, immediately consult a physician. | | | |
| | Following skin contact: | Remove all contaminated clothes using sterile gauze. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain. | | | |
| | 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 the oral cavity, drink 1-2 glasses of water. Do not induce vomiting. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital. | | | |
| | Self-protection of the first aider: | - | | | |
| 4.2. | Most important symptoms a | Most important symptoms and effects, both acute and delayed | | | |
| | Following inhalation: | No information available | | | |
| | Following skin contact: | No information available | | | |
| | Following eye contact: | No information available | | | |
| | Following ingestion: | No information available | | | |



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| Trade name: | | Ţ | | |
|---------------|-----------|----------------------|------------------|------------|
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| 4. | .3. | Indication of any immediate medical attention and special treatment needed | | | | | |
|----|-----|--|--|--|--|--|--|
| | | No information available | | | | | |

| SECTIO | SECTION 5. Firefighting measures | | | | | | |
|--------|---|---|--|--|--|--|--|
| 5.1. | Extinguishing media | | | | | | |
| | Suitable extinguishing media: | Water, CO ₂ , foam, dry powder | | | | | |
| | Unsuitable extinguishing medi | a: No information available | | | | | |
| 5.2. | Special hazards arising from th | e substance or mixture | | | | | |
| | Hazardous combustion products: | No information available. | | | | | |
| 5.3. | Advice for firefighters | | | | | | |
| | Firefighters must always use fireproof suit and self-sustaining breathing apparatus with open circle that contains pressurized air in case of fire in closed space. | | | | | | |
| 5.4. | Additional information | | | | | | |
| | Prevent spills and water used for putting out fire from contaminating waterways by enclosing and covering drains. | | | | | | |

| SECTIO | ON 6. Accidental release measures | | | | | |
|--------|---|---|--|--|--|--|
| 6.1. | Personal precautions, protective equipment and emergency procedures | | | | | |
| 6.1.1. | For non-emergency personnel | | | | | |
| | Protective equipment: | Use protective equipment in accordance with Section 8. Do not get in eyes or on skin. Do not inhale vapor/aerosols. Remove the persons not directly involved in rescuing procedure from the scene of event. | | | | |
| | Accident prevention methods: | Keep away from heat, flames and sparks. Secure proper ventilation. Prevent electrostatic charge buildup. Use only grounded devices and equipment. Do not release in drains - explosion hazard. | | | | |
| | Emergency procedures: In case of accident secure the location and evacuate the personne not involved in recovery. | | | | | |
| 6.1.2. | For emergency responders: | | | | | |
| | Use protective equipment; in case (see Section 8). | of inadequate ventilation use adequate airways protective equipment | | | | |
| 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 material for containn | nent and cleaning up | | | | |



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| Trade name: | | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | | | |
|---------------|-----------|--|------------------|------------|--|--|--|
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| 6.3.1. | Bunding, covering of drains; capping procedures: | Sand bags. | | | | |
|--------|--|---|--|--|--|--|
| 6.3.2. | Cleaning up: | Where possible, soak up the product using inert matter, such as sand, silica gel, saw dust). 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 and involved materials with water. | | | | |
| 6.3.3. | Other information: | Recovery of contaminated area should only be conducted by qualified person that uses stipulated protective equipment. Prevent the waste water from entering waterways. | | | | |
| 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 info | rmation about containment. | | | | |

| SECTIO | ON 7. Handling and storage | | | | | | | |
|--------|--|---|---|--|--|--|--|--|
| 7.1. | Precautions for safe handling | | | | | | | |
| 7.1.1. | Protective measures | | | | | | | |
| | Measures to prevent fire: | | Keep away from heat, flames and sparks. Secure proper ventilation. | | | | | |
| | Measures to prevent aerosol and dust generatio | n: | Adequate ventilation of the rooms where the product is kept and handled. Containers must be firmly closed. | | | | | |
| | Measures to protect the environment: | | Keep the containers firmly closed in vertical position when the product is not used. Prevent the product from entering waterways, sewerage and drainage systems by using barrage and semi-barrage made of sand, as well as covering the drainage by using plastic foil. | | | | | |
| | Other measures: | | - | | | | | |
| 7.1.2. | Advice on general occupational hygiene: | | | | | | | |
| | Do not eat, drink or smoke in the workspace. Th | oroughly | wash hands after work and before eating. | | | | | |
| 7.2. | Conditions for safe storage, including any incom | patibiliti | ies | | | | | |
| | Technical measures and storage conditions: | ln dry, echnical measures and storage conditions: be firm rooms | | | | | | |
| | Packaging materials: | Manu | facturer's original packaging. | | | | | |
| | Requirements for storage rooms and vessels: | | o away from food and drink. Keep the containers | | | | | |



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| Trade name: | | Γ | | |
|---------------|-----------|----------------------|------------------|------------|
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| | Advices for storage equipment: | Keep away from heat, flames, sparks and sunlight. | | | |
|------|--|--|--|--|--|
| | 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 9). | | | |
| 7.3. | Specific end use(s) | | | | |
| | Recommendations: | Secure stations for rinsing eyes and showering in the vicinity of work area. | | | |
| | Industrial sector specific solutions: | - | | | |

| 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/m³ | | | |
| - | | | - | | - | - | | - | |
| | 1 | | | | | | | | |
| Substance name: | - | | | | | | | | |
| EC No: | - | | CAS No: | - | | | | | |
| DNEL | | | | | | | | | |
| | | | | | Industrial | | | | |
| Route of exp | ocuro: | Acute effect | | Ad | cute effect | Chronic e | effect | Chronic effect | |
| Noute of exp | osuie. | local | | systemic | | local | | systemic | |
| Oral | | - | - | | | - | | - | |
| Inhalation | | - | - | | | - | | - | |
| Dermal | | - | - | | | - | | - | |
| Critical physic | al paran | neters: s | olubility, fla | mmabilit | y, corrosivity: | | | | |
| | | | | | Consumer | | | | |
| Route of exp | ocura. | Acu | ıte effect Acut | | cute effect | Chronic e | effect | Chronic effect | |
| Noute of exp | osure. | | local | ! | systemic | local | | systemic | |
| Oral | | - | | - | | - | | - | |
| Inhalation | | - | | - | | - | | - | |
| Dermal - | | | - | | - | | - | | |
| PNEC | | | | | | | | | |
| Environmenta | al protec | tion targ | get | | PNEC | | | | |
| Fresh water | | | | | No info | rmation availabl | e | | |



Freshwater sediments

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No information available

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| | | | <u>l</u> | |
|--|---|--|---|--|
| Marine wa | ater | | No information available | |
| Marine se | diments | | No information available | |
| Food chai | 'n | | No information available | |
| Microorga | anisms in sewage treatment | | No information available | |
| Soil (agric | cultural) | | No information available | |
| Air | | | No information available | |
| | | | | |
| 8.2. | Exposure controls | | | |
| 8.2.1. | Appropriate engineering control | S | | |
| Substance/mixture related measures to prevent exposure Use the product in well ventilated rooms. Use the product in well ventilated rooms. | | | product in well ventilated rooms. Use personal protective ent. Do not eat, drink or smoke in the workspace. | |
| | Structural measures to prevent exposure: | In acco | rdance with Section 7. | |
| | Organisational measures to prevent exposure: | | zation of work in order to reduce other worker's influence 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: | Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air. | | |
| 8.2.2.2. | Skin protection | | | |
| | Hand protection: | Protective gloves must be according to the EU Directive 2016/425/EEC and standard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min | | |
| | Other skin protection: | Wear antistatic clothing made of natural fibers (such as cotton) with long sleeves (EN 13034), and shoes that cover the entire fo (EN 10335). | | |
| 8.2.2.3. | Respiratory protection: | Suitable mask or half mask equipped with a combined "A-P" filter and used when concentration levels exceed GVI. | | |
| 8.2.2.4. | Thermal hazards: | No info | rmation available | |
| 8.2.3. | Environmental exposure controls | | | |
| | Substance/mixture related measures to prevent exposure: | See Sec | tion 6 | |
| | | | | |



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| Trade name: | | Γ | | |
|---------------|-----------|----------------------|------------------|------------|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |

| 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 |

| 9.1. | Information on basic physical ar | nd chemical properties | |
|------|---|--------------------------|--------------------------|
| | | Value | Method |
| | Physical state: | liquid | No information available |
| | Colour: | red | No information available |
| | Odour/odour threshold: | 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 |
| | 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 noctanol/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 | | |

| SECTIO | N 10.: Stability and reactivity | |
|--------|---------------------------------|------------------------------------|
| 10.1. | Reactivity: | See subsections 10.3 through 10.5. |



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| Trade name: | | NUCLEAR FAST RED (KERNECHTROT) REAGEN | | | | | |
|---------------|-----------|---------------------------------------|------------------|------------|--|--|--|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 | | | |

| 10.2. | Chemical stability: | The product is chemically stable under standard ambient conditions of storing and using. |
|-------|-------------------------------------|--|
| 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. |

| 11.1. Information | n on toxicological effe | cts | | | | | |
|----------------------------------|--------------------------|-----------------|---|----------------------------|---------|--------------------------------|--|
| Acute toxic | ity: | | | | | | |
| Route of exposure: | Method | Species | Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture} | Exposu | re time | Results | |
| Oral: | No information available | _ | No information available | No infor avail | | _ | |
| Dermal: | No information available | _ | No information available | No infor avail | | _ | |
| Inhalation: | No information available | _ | No information available | No infor | | _ | |
| | | | | | | | |
| Specific tar | get organ toxicity – si | ngle exposure (| (STOT SE): | | | | |
| | Specific 6 | effects | Target or | Target organ | | | |
| Oral: | No information avail | able | No information a | No information available | | | |
| Dermal: | No information avail | able | No information a | No information available - | | | |
| Inhalation: | No information avail | able | No information available | | - | | |
| | | | | | | | |
| Aspiration | hazard: | - | | | | | |
| leritation of | nd corrosion | | | | | | |
| IIIItation ai | Exposure tim | ne Sr | pecies Evaluatio | n Me | ethod | Note | |
| Skin corrosion/irritation: | - | - | - | - | | No information available | |
| Serious eye damage/irritation | - | - | - | - | | No information available | |



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| Trade name: | | NUCLEAR FAST RED (I | (KERNECHTROT) REAGENT | | | | |
|---------------|-----------|----------------------|-----------------------|------------|--|--|--|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 | | | |

| Sensitiz | ation | | | | | | | | | |
|---|--------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|------|--|--|--|--|
| Dermal exposure | : No informatio | n available | | | | | | | | |
| Inhalation exposure: | No informatio | No information available | | | | | | | | |
| Sympto | ms related to the p | ohysical, chemic | cal and toxicolog | jical characterist | ics | | | | | |
| Oral exposure: | No informatio | n available | | | | | | | | |
| Dermal exposure: No information available | | | | | | | | | | |
| Inhalation exposure: | No informatio | n available | | | | | | | | |
| Eye exposure: | No informatio | n available | | | | | | | | |
| Repeate | ed dose toxicity (su | bacute, subchro | onic, chronic) | | | | | | | |
| · · | Dose | Exposure time | Species | Method | Evaluation | Note | | | | |
| Subacute oral | No information available | No information available | No information available | No information available | No information available | - | | | | |
| 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 No informat inhalation 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 | - | | | | |



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| Trade name: | | | NUCLEAR | R FAST RI | ED (K | ERNECHTROT |) REAGEN | T | | |
|--|------------------------|------------------------|--------------------------------|--|--------------------------|--------------------------------|-------------------|----|------------|----|
| Product code: | KR-C | KR-OT-X** Date of comp | | | ilation: 14 I | | 14 November 2022 | | Version: 4 | |
| Chronic inhalation | No info | ormation le | No information available | No informat available | | No information available | No information | on | - | |
| Specific | target o | rgan toxic | rity – repeated e | xposure (S | STOT | RE): | | | | |
| <u> </u> | | 1 | Specific effects | • | | Target orga | n | | No | te |
| Subacute oral No information available | | | e | No in | formation availa | ble | - | | | |
| Subacute derma | | No infor | mation available | е | No in | formation availa | ble | - | | |
| Subacute inhalat | ion | No infor | mation available | е | No in | formation availa | ble | - | | |
| Subchronic oral | | No infor | mation available | е | No in | formation availa | ble | - | | |
| Subchronic derm | nal | No infor | mation available | e | No information available | | | - | | |
| Subchronic inhal | ation | No infor | information available | | | No information available | | | - | |
| Chronic oral | | No infor | mation available | e | No information available | | | - | | |
| Chronic dermal | | No infor | mation available | le No information available - | | | | | | |
| Chronic inhalation | on | No infor | mation available | e | No in | formation availa | ble | _ | | |
| CMR ef | fects (car | cinogenic | ity; mutagenicity | y; reprodu | ctive 1 | coxicity) | | | | |
| Carcino | genicity: | | | No infor | matic | n available | | | | |
| Mutage | enicity <i>in-</i> | vitro: | | No information available No information available No information available | | | | | | |
| Genoto | xicity: | | | | | | | | | |
| Mutage | enicity <i>in-</i> | vivo: | | | | | | | | |
| Germ c | ell mutag | enicity: | | No infor | matic | n available | | | | |
| Reprod | Reproductive toxicity: | | | No infor | matic | n available | | | | |
| Summa propert | - | valuation | of the CMR | No infor | matic | n available | | | | |
| 11.2. Informa | ation on c | other haza | ırds: | | | | | | | |
| | | oting prop | | | | | | | | |
| 11.2.1. LIIUUCII | ne distup | rang prop | Citics. | | | | | | | |

| SECTION 12. General notes: |
|----------------------------|
| 12.1. Toxicity |

No known endocrine disrupting properties

that affect human health.

Other information:

11.2.2.



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| Trade name: | | NUCLEAR FAST RED (F | (ERNECHTROT) REAGENT | Γ |
|---------------|-----------|----------------------|----------------------|------------|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |

| Acute (short-terr toxicity | n) Do | se Expo | | Species | Method | Eval | uation | No | ote |
|----------------------------|----------------------------|----------------|------|--------------------------|--------|--------------------------|----------------------------|-----|---------|
| Fish | LC ₅₀ | 96 ho | ıırc | No information available | - | No inforr available | mation | - | |
| Crustacea: | EC ₅₀ | 48 ho | iirc | No information available | - | No inforr available | mation | - | |
| Algae/aquatic pla | ants IC ₅₀ | 72 ho | ıırc | No information available | - | No inforr available | nation | - | |
| Other organisms | - | - | | _ | - | - | | - | |
| Chronic (long-te toxicity | rm) Do | se Expo | | Species | Method | Evaluation | | No | ote |
| Fish | LC ₅₀ | 96 ho | iirc | No information available | - | No inforr available | mation | - | |
| Crustacea: | EC ₅₀ | 48 ho | iirc | No information available | - | No inforr available | No information - available | | |
| Algae/aquatic pl | ants IC ₅₀ | 72 ho | ıırc | No information available | - | No inforr available | i _ | | |
| Other organisms | - | - | | - | - | - | | - | |
| | nce and deg degradation | • | | | | **** | | | |
| | Degrada | tion half-live | S | Method | | E۱ | /aluation | | Note |
| Marine water | | tion available | | No information available | | No information available | | | - |
| Fresh water | | tion available | | No information available | | No information available | | | - |
| Air | | tion available | | No information available | | No information available | | | - |
| Soil | No informa | tion available | · 1 | No information available | | No information availa | | e | - |
| Biodegr | adation | | | | | | | | |
| % Degradation | | (days) | | Method | Eva | Evaluation | | ote | |
| No information available | No available | information | | information available | | nformation ble | | | ailable |
| | | | | | | | | | |
| 12.3. Bioaccu | mulative po | | | | | | | | |
| | -water parti | | | | | | | | |



Trade name:

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NUCLEAR FAST RED (KERNECHTROT) REAGENT

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| Bioconcentration factor (BCF) Value | 4 |
|--|---------|
| Value Species Method Evaluation Note No information available Species Method Evaluation Chronic toxicity on fish LC ₅₀ No information available No No No No Information available information available available Chronic toxicity on toxi | mation |
| No information available No information available No information available No information available No information available | |
| Available available available available available available available available Chronic ecotoxicity Value Dose Exposure time Species Method Evaluation Chronic toxicity on fish LC50 Information available available available available available Chronic toxicity on FC50 Information information available information information information available information information information information available information information information available information inform | |
| Value Dose Exposure time Species Method Evaluation Chronic toxicity on fish LC ₅₀ No information available No information available No information available No information information available No information information available | |
| Value Dose Exposure time Species Method Evaluation Chronic toxicity on fish LC ₅₀ No information available No information available No information available No information available No information information available No information information available | |
| Chronic toxicity on fish Chronic toxicity on Chronic toxicity on Chronic toxicity on Chronic toxicity on FCro. Chronic toxicity on FCro. No Information | |
| Chronic toxicity on fish LC ₅₀ information available information available information available information available information information available information informat | Note |
| Chronic toxicity on FC _{co} information information information information - | |
| crustacea (Daphnia) available available available available 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 - | |
| | |
| Adsorption / desorption | |
| Transport A/D coefficient | |



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| Trade name: | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | |
|---------------|--|----------------------|------------------|------------|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |

| | | | • | • | ī | |
|----------|---|-------------------|--------------------------|--------------------------|--------------------------|---|
| Soil-wa | ter No availabl | information e | No information available | No information available | No information available | - |
| Water-a | air No availabl | information e | No information available | No information available | No information available | - |
| Soil-air | No availabl | information e | No information available | No information available | No information available | - |
| | | | | | | |
| 12.5. | Results of PB | T and vPvB asses | ssment | | | |
| | No informati | on available | | | | |
| | | | | | | |
| 12.6. | Endocrine dis | srupting propert | ies | | | |
| | No known er | ndocrine disrupti | ng properties that | affect the environm | nent. | |
| | | | | | | |
| 12.7. | Other advers | e effects | | | | |
| | No informati | on available | | | | |
| | | | | | | |
| SECTIO | N 13. Disposa | al consideration | s | | | |
| 13.1. | Waste treatment methods | | | | | |
| | | | | | | |
| 13.1.1. | Product/Pa | ickaging disposa | l: | | | |
| | Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. | | | | | |
| | | | | | | |
| 13.1.2. | Waste code | es/waste designa | ntions according to | D Low: | | |
| | 15 01 10*: packaging that contains residual hazardous substances or is contaminated with hazardous substances | | | | | |
| | | | | | | |
| 13.1.3. | Waste trea | tment – relevant | information: | | | |
| | No informa | ation available | | | | |
| | | | | | | |
| 13.1.4. | Sewage dis | sposal – relevant | information: | | | |
| | Waste mus | t not be dispose | d of into the sewa | ge system. | | |
| | | | | | | |
| | Other disno | osal recommend | ations: | | | |
| 13.1.5. | Other dispo | | | | | |



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| Trade name: | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | |
|---------------|--|----------------------|------------------|------------|
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| | 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: | | | |
| | | agement Act, Ordinance on Waste Management, Regulation on categories, types te with waste catalog and list of hazardous waste | | |
| SECTIO | N 14. Transport informati | ion | | |
| SECTIO | Transporting/shipment by | | | |
| UN num | | Not subject to transport regulations | | |
| | per shipping name: | - | | |
| | rt hazard class(es): | - | | |
| Packing | | - | | |
| ····· | mental hazards: | _ | | |
| Special | precautions for user: | - | | |
| • | Transporting/shipment by | rail (RID) | | |
| UN num | | Not subject to transport regulations | | |
| UN prop | per shipping name: | - | | |
| Transpo | rt hazard class(es): | - | | |
| Packing | group: | - | | |
| Environi | mental hazards: | - | | |
| Special | precautions for user: | - | | |
| | Transporting/shipment by | r inland waterways (ADN) | | |
| UN num | nber: | Not subject to transport regulations | | |
| UN prop | per shipping name: | - | | |
| Transpo | rt hazard class(es): | - | | |
| Packing | group: | - | | |
| Environi | mental hazards: | - | | |
| Special | precautions for user: | - | | |
| | Transporting/shipment by | r sea (IMDG) | | |
| UN num | nber: | Not subject to transport regulations | | |
| UN prop | per shipping name: | - | | |
| Transpo | rt hazard class(es): | - | | |
| Packing | group: | - | | |
| Environi | mental hazards: | Not subject to transport regulations | | |



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| Trade name: | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | | |
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| Special precautions for user: | - |
|---|--------------------------------------|
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: | - |
| Transporting/shipment by air (IC. | AO-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: - | |

| 5.1. Safety, health and en | rironmental regulations/legislation specific for the substance or mixture | | |
|----------------------------|---|--|--|
| EU regulations | | | |
| Authorisations and/o | Authorisations and/or restrictions of use | | |
| Authorisations: | - | | |
| Restrictions: | - | | |
| Other EU regulations: | 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; 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; 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; 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; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); | | |



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| Trade name: | NUCLEAR FAST RED (KERNECHTROT) REAGENT | | | |
|---------------|--|----------------------|------------------|------------|
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| | National regulation: | 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, Transport of Hazardous Substances Act |
|-------|----------------------------|--|
| 15.2. | Chemical safety assessment | |
| | None | |

| SECTIO | ON 16. Other information | | | | |
|----------|---|--|--|--|--|
| 16.1. | Indication of changes: | - | | | |
| 16.2. | Abbreviations and acronyms: | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative | | | |
| 16.3. | Key literature references and source of data: | - | | | |
| 16.4. | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) | | | | |
| Classifi | ication | Classification procedure | | | |
| - | | - | | | |
| 16.5. | Relevant H statements (num | ber and full text) | | | |
| | H315 | Causes skin irritation. | | | |
| | H: H319 | Causes serious eye irritation. | | | |
| | H335 | May cause respiratory irritation. | | | |
| 16.6. | Training advice: | - | | | |
| 16.7. | Further information: | ** "X" in the product code marks different volumes (different packagings 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



According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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|---------------|--|----------------------|------------------|------------|
| Product code: | KR-OT-X** | Date of compilation: | 14 November 2022 | Version: 4 |

| - | | |
|---|--|--|
| | | |
| | | |



According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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| Trading name: | SODIUM TETRABORATE, SOLUTION | | | | |
|---------------|------------------------------|----------------|------------------|----------|---|
| Product code: | NTB-OT-X** | Revision date: | 14 November 2022 | Version: | 7 |

| SECT | ION 1: Identification of | the substance | e/mixture | e and of the company/undertaking | |
|------|---|---|--|----------------------------------|--|
| 1.1 | Product identifier | | | | |
| | Trading name: | SODIUM TE | TRABORA | TE, SOLUTION | |
| | Chemical name: | - | | | |
| | Catalogue number: | NTB-OT-X** | | | |
| 1.2 | Relevant identified us | Relevant identified uses of the substance or mixture and uses advised against | | | |
| | Uses: | | For use | with special staining kits. | |
| | Uses advised against: | | Only the | e 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 | 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 number | | | | |
| | National Protection and Rescue Director | | ectorate: | 112 | |
| | Medical information: | | | +385 1 2348 342 | |
| | Other information: | | | - | |

| SECTION 2. Hazards identification | | | | | | |
|-----------------------------------|--|--------------|---------------------|--|--|--|
| 2.1 | Classification of the substance or mixture | | | | | |
| 2.1.1 | Classification according to Regulation (EC) No 1272/2008 (CLP) | | | | | |
| | Hazard class and catego | ory code: | Hazard statements*: | | | |
| | Flam. Liq. 2 | | H225 | | | |
| | Eye Irr. 2 | | H319 | | | |
| | STOT SE 3 | | H336 | | | |
| 2.1.2. | Additional information | | | | | |
| | - | | | | | |
| *For ful | *For full text of Hazard- and EU Hazard-statements: see SECTION 16 | | | | | |
| 2.2 | Label elements | | | | | |
| | Product identification: | SODIUM TETRA | BORATE, SOLUTION | | | |
| | Identification number: - | | | | | |



According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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| Trading name: | SODIUM TETRABORATE, SOLUTION | | | | |
|---------------|------------------------------|----------------|------------------|----------|---|
| Product code: | NTB-OT-X** | Revision date: | 14 November 2022 | Version: | 7 |

| | Authorization number: | | |
|-----|---|---|--|
| | Hazard pictograms: | GHS02 GHS07 | |
| | Signal word: | Danger | |
| | Hazard statements: | H225 Highly flammable liquid and vapor.H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness | |
| | Precautionary statements: | P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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. | |
| | Supplemetal hazard information (EU): | - | |
| 2.3 | Other hazards | | |
| | Endocrine Disrupting Properties: No known endocrine disrupting properties. 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. | | |

| 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) | | |
| 64-17-5/ 200-578-6/ 603-002-00-5 | 01-2119457610-43- 0147 | 40 - 60 % | ethanol | Flam. Liq. 2; H225 | | |
| 67-63-0/ 200-661-7/ 603-117-00-0 | - | 20 - 30 % | propan-2-ol | Flam. Liq. 2; H225 Eye Irr. 2; H319 STOT SE 3; H336 | | |
| 1330-43-4/ 215-540-4/ 005-011-00-4 | - | < 0.5 % | sodium tetraborate | Eye Irr. 2; H319 Repr. 1B; H360FD | | |



SAFETY DATA SHEET ording to Regulation (EC) No. 1907/2

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| 4.1 | Description of first aid measures | | | | | |
|-----|-------------------------------------|--|--|--|--|--|
| | General notes: | If the suggested first aid measures do not prove sufficient, seek medical attention. | | | | |
| | Following inhalation: | Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen. | | | | |
| | Following skin contact: | Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain. | | | | |
| | 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: | Do not induce vomiting. Do not insert any object into the unconscious person's mouth. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital. | | | | |
| | Self-protection of the first aider: | - | | | | |
| 4.2 | Most important symptoms and ef | fects, both acute and delayed | | | | |
| | Following inhalation: | Central nervous system depression, prolonged or repeated exposure can cause: nausea, headache, vomiting, narcosis, drowsiness. | | | | |
| | Following skin contact: | Defatting, dry skin. | | | | |
| | Following eye contact: | Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain. | | | | |
| | Following ingestion: | Overexposure may cause mild, reversible liver effects. Aspiration may lead to: lung edema, pneumonia | | | | |
| 4.3 | Indication of any immediate medi | cal attention and special treatment needed | | | | |

| SECTIO | ECTION 5. Firefighting measures | | | | | |
|--------|--|--|--|--|--|--|
| 5.1 | Extinguishing media | | | | | |
| | Suitable extinguishing media: Carbon dioxide (CO ₂), foam, dry powder. | | | | | |
| | Unsuitable extinguishing media: No information available. | | | | | |
| 5.2 | Special hazards arising from the substance or mixture | | | | | |
| | Hazardous combustion products: | Carbon oxides Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. | | | | |
| 5.3 | Advice for firefighters | | | | | |



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| | Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. |
|-----|--|
| 5.4 | Additional information |
| | Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system. |

| SECTIO | ON 6. Accidental release measu | ures | | | | | |
|--------|---|---|--|--|--|--|--|
| 6.1 | Personal precautions, protective | ve equipment and emergency procedures | | | | | |
| 6.1.1. | For non-emergency personnel | | | | | | |
| | 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. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources. | | | | | |
| | 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 material for containment and cleaning up | | | | | | |
| 6.3.1. | Bunding, covering of drains; capping procedures: Sand protective barrier or barriers made of similar materials. | | | | | | |
| 6.3.2. | Cleaning up: | Where possible, the substance can be absorbed by using absorbing material. 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 and involved materials with water. | | | | | |
| 6.3.3. | Other information: | Secure proper ventilation. Do not use incompatible materials (see Section 10). | | | | | |
| 6.4 | Reference to other sections | | | | | | |
| | See Section 7 for information of | on safe handling. | | | | | |
| | | on personal protection equipment. | | | | | |
| | See Section 13 for disposal info | See Section 13 for disposal information. | | | | | |

| SECTIO | SECTION 7. Handling and storage | | | | |
|--------|---------------------------------|--|--|--|--|
| 7.1 | Precautions for safe handling | | | | |
| 7.1.1. | Protection measures | | | | |



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| | Measures to prevent fire: | Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke. |
|--------|--|---|
| | Measures to prevent aerosol and dust generation | on: Secure proper ventilation. |
| | Measures to protect the environment: | Prevent spilling into the sewage system and waterways. |
| | Other measures: | Protect against electrostatic charges. |
| 7.1.2. | Advice on general occupational hygiene: | |
| | Do not eat, drink or smoke in the workspace. Th | oroughly wash hands after work and before eating. |
| 7.2 | Conditions for safe storage, including any incom | npatibilities |
| | Technical measures and storage conditions: | Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures ranging from 15 to 25 °C. Protect from heat and direct sunlight |
| | Packaging materials: | Manufacturer's original packaging. Suitable material: HDPE containers. |
| | 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: - | |

| SECTION 8. Exposure controls/personal protection | | | | | | | | |
|---|---------|---------|----------|---|--|--|--|--|
| 8.1 Control parameters | | | | | | | | |
| Occupational exposure limit Substance CAS No values/short term values Biological limit valu | | | | | | | | |
| | | ppm | mg/m³ | _ | | | | |
| Ethanol | 64-17-5 | 1000/- | 1900/- | - | | | | |
| Propan-2-ol | 67-63-0 | 400/500 | 999/1250 | - | | | | |
| | | | | | | | | |
| Substance name: - | | | | | | | | |



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| EC No: | _ | CAS No | | _ | | | | | | |
| DNEL | <u> </u> | CAS INC |) . | | | | | | | |
| DITLE | | | | In | dustrial | | | | | |
| Route of | A | cute | | Acute | | | Ehronic | | Chronic | |
| exposure: | effec | t local | effect | effect systemic | | eff | ect local | | effect systemic | |
| Oral | - | | - | | - | | | - | | |
| Inhalation | 1900 m (ethano | _ | - | | - | | | - | g/m³ (ethanol) g/m³ (propan-2 | -ol) |
| Dermal | - | | - | | - | | | - | g/kg (ethanol) g/kg bw/day (p | ropan- |
| Critical physical pa | arameters: | solubility, | flamma | bility, co | rrosivity: | | - | | | |
| | | | | Co | nsumer | | · | | | |
| Route of | , | Acute | Acute | | | Chronic | | | Chronic | |
| exposure: | effe | ect local | effec | effect systemic | | effect local | | | effect systemic | |
| Oral | - | | - | - | | - | | _ | 'kg bw/day (eth 'kg bw/day n-2-ol) | ianol) |
| Inhalation | 950 i (etha | mg/m³ inol) | - | | - | | 114 mg/m³ (ethanol) 89 mg/m³ (propan-2-ol) | | ol) | |
| Dermal | - | | - | | - | | | - | g/kg (ethanol) g/kg (propan-2- | -ol) |
| PNEC | - | | | | - | | | | | |
| Environmental pro | tection ta | rget | | | PNEC | | | | | |
| Fresh water | | | | | 0.96 mg/l (ethanol) | | | | | |
| Freshwater sedime | ents | | | | 3.6 mg/kg (ethanol) | | | | | |
| Marine water | | | | | 0.79 mg/l (ethanol) | | | | | |
| Marine sediments | | | | | no information available | | | | | |
| Food chain | | | | | no information available | | | | | |
| Microorganisms in | n sewage 1 | reatment | | | no information available | | | | | |
| Soil (agricultural) | | | 0.63 mg/kg (ethanol) | | | | | | | |
| Air | | | | | no inforr | matio | on available | | | |
| | | | | | | | | | | |
| 8.2 Expo | sure contr | ols | | | | | | | | |
| 8.2.1. Appr | opriate en | aineerina | controls | | | | | | | |



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| 8.2.3. | Environmental exposure controls Substance/mixture related measures to prevent exposure: | See Se | ction 6 | | |
|--------------------------------------|--|--|---|--|--|
| 8.2.2.4. | Thermal hazards: | No info | ormation available | | |
| 8.2.2.3. | Respiratory protection: | If the concentration level exceeds the GVI values (or because of inadequate ventilation), use a filter for organic vapors, type "A" (boiling point >65°C) according to EN 14387. | | | |
| | Other skin protection: | suitable cover to | ng everyday work use antistatic clothing (EN 13688) and ble footwear, such as rubber boots (EN 20345) or shoes that r the entire foot. In case of spilling hazard, use clothing mad apermeable material suitable for protection from liquid nicals (Viton, PVC, himex) and footwear made from the same erial. | | |
| | Hand protection: | Regula Full co | otective gloves have to satisfy the specification of tion (EU) 2016/425 and the related standard EN 374. Intact: Glove material: butyl rubber Glove thickness: ≥ 0.50 mm Time until perforation: > 480 min contact: Glove material: nitrile rubber Glove thickness: 0.4 mm Break through time: 35 min | | |
| 8.2.2.2. | Skin protection | 71- | | | |
| 8.2.2.1. | Eye and face protection: | Safety glasses that stick to face (EN 166) or visor in case of low levels of concentration in air; protective gas mask that covers entire face in case of higher levels of concentration in air. | | | |
| 8.2.2. | Personal protection equipment | | | | |
| Technical measures to prevent exposu | | | Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering. | | |
| | Organizational measures to preversexposure: | ent | Organization of work in order to reduce other worker's influence during work process. | | |
| | Structural measures to prevent exposure: | | In accordance with Section 7. | | |
| | 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. | | |



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| 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 |

| Information on basic physical and chemical properties | | | | | | | |
|---|---------------------------------------|--------------------------|--|--|--|--|--|
| | Value | Method | | | | | |
| Physical state: | liquid | No information available | | | | | |
| Colour: | colourless | No information available | | | | | |
| Odour/odour threshold: | ethanol 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 | | | | | |
| Flash point: | 25 °C | 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 | | | | | |

| SECTIO | 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 dangerous reactions known. | | | | | |



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| 1 | 0.4 | Conditions to avoid: | Avoid heat, sparks, open flames and other ignition sources. |
|---|-----|-----------------------------------|---|
| 1 | 0.5 | Incompatible materials: | Acids, bases, oxidants. |
| 1 | 0.6 | Hazardous decomposition products: | Carbon monoxide and carbon dioxide. |

| SECTION 11. Tox | ion on toxicologi | | | | | | | |
|----------------------------------|--------------------|----------------|-----------|---|-----------------------|-------------|-----------------------|---|
| Acute to | | | | | | | | |
| Route of exposure: | Method | Species | Dos | e LD ₅₀ /LC ₅₀ or ATE _{mix} | | Exposure ti | me | Results |
| Oral: | - | rat | | LD ₅₀ | | - | | 7.060 mg/kg (ethanol) 5.840 mg/kg (2-propanol |
| Dermal: | - | rabbit | | LD ₅₀ | | - | | >20.000 mg/kg (ethanol) 12.800 mg/kg (2-propanol |
| Inhalation: | - | rat | | LC ₅₀ | | 4 h | | >8.000 mg/ (ethanol) 37.5 mg/l (2 propanol) |
| c .c. | | | | TOT (5) | | | | |
| Specific | target organ toxio | ecific effects | posure (S | | t organ | | | Note |
| Oral: | No information | | | No informatio | et orgar on avails | | _ | Note |
| Dermal: | No information | | | | | - | | |
| Inhalation: | No information | | | | | | se drowsiness ness | |
| | | | | | | | | |
| Aspiratio | n hazard: | | No inforr | mation available | e | | | |
| Irritation | and corrosion | | | | | | | |
| : | Expos | ure time | Spec | ies Evalu | ation | Method | | Note |
| Skin corrosion/irritatio | n: - | | - | - | | - | - | |
| Serious eye damage/irritation | - | | rabbit | - | | _ | cause irritat | s serious eye |



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| Sensitiza | ation | | | | | | |
|--------------------------|--|-----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------|
| Skin sensitizatior | 1: | No inf | ormation avail | able. | | | |
| Respiratory sensi | tization: | No inf | ormation avail | able. | | | |
| Sympto | ms relate | d to the ph | nysical, chemica | al and toxicolog | gical characterist | ics | |
| Oral exposure: | | | on available. | | | | |
| Dermal exposure | : N | o informati | on available. | | | | |
| Inhalation expos | ure: No | o informati | on available. | | | | |
| Eye exposure: | N | o informati | on available. | | | | |
| Repeate | ed dose to | oxicity (sub | acute, subchro | onic, chronic) | | | |
| | | ose | Exposure time | Species | Method | Evaluation | Note |
| Subacute oral | te oral No information available | | No information available | No information available | No information available | No information available | - |
| 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 | _ |
| Subchronic oral | 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 | - |
| Subchronic inhalation | | | No information available | No information available | No information available | No information available | - |
| Chronic oral | No int | formation le | No information available | No information available | No information available | No information available | - |
| Chronic dermal | No inta | formation le | No information available | No information available | No information available | No information available | - |



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| Chronic inhalation | No information available | | No information available | No information available | No information available | No information available | on | - |
|--|--------------------------------|----------------|--------------------------------|--|--------------------------------|--------------------------------|-------|------------------|
| Spec | fic target | organ toxicit | y – repeated e | exposure (STOT | RE): | | | |
| ii | | | Specific effe | | Target o | rgan | | Note |
| Subacute oral No information available | | | | | No information | n available | _ | |
| Subacute derr | nal | No informa | ntion available | | No informatio | n available | - | |
| Subacute inha | lation | No informa | ntion available | | No informatio | n available | - | |
| Subchronic or | al | No informa | ntion available | | No informatio | n available | - | |
| Subchronic de | ermal | No informa | ntion available | | No informatio | n available | - | |
| Subchronic in | halation | No informa | ntion available | | No informatio | n available | - | |
| Chronic oral | | No informa | ition available | | No informatio | n available | - | |
| Chronic derma | al | No informa | ition available | | No informatio | n available | - | |
| Chronic inhala | ition | No informa | ntion available | | No informatio | n available | - | |
| Carci Muta | nogenicit genicity <i>i</i> | y: | y; mutagenicit | Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met | | | | |
| | toxicity: | | | | able data, the cla | | | |
| | genicity i | | | Based on available data, the classification criteria are not met. | | | | |
| | | agenicity: | | Based on available data, the classification criteria are not met. | | | | |
| Repr | oductive t | oxicity: | | Based on available data, the classification criteria are not met | | | | |
| Sumr | mary of erties: | evaluation | of the CI | MR Based on met. | available data, 1 | the classifica | ation | criteria are not |
| 11.2 Infor | mation or | n other hazard | ds: | | | | | |
| 11.2.1. Endo | crine disr | upting prope | rties: | | | | | |
| No k | nown end | locrine disrup | ting propertie | es that affect hu | man health. | | | |
| 11.2.2. Othe | r informa | tion: | | | | | | |
| _ | | | | | | | | |

| SECTION 12. Ecological information | | | | | |
|------------------------------------|----------|--|--|--|--|
| 12.1 | Toxicity | | | | |



12.2

Persistence and degradability

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| Acute (short-term) toxicity | Dose | Exposure time | Species | Method | Evaluation | Note |
|---------------------------------|------------------|------------------|--------------------------|--------------------------------|--|------|
| Fish | LC ₅₀ | 96 hours | Pimephales promelas | No information available | 8.140 mg/l (ethanol) 9.640 mg/l (2- propanol) | - |
| Crustacea: | EC ₅₀ | 48 hours | Daphnia magna | No information available | 7.800 mg/l (ethanol) 13.299 mg/l (2-propanol) | - |
| Algae/aquatic plants | IC ₅₀ | 4 days | algae | No information available | 5.000 mg/l (ethanol) >1,000 mg/l (2-propanol) | - |
| 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 | - |
| Algae/aquatic plants | IC ₅₀ | 72 hours | No information available | No information available | No information available | - |
| Other organisms | _ | _ | _ | _ | _ | _ |

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 | - |
| | | 1 | 1 | i . |



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| Produc | ct code | e: | NTB-0 | OT-X* | * | | Revi | sion date: | 14 Nover | mber 2022 | Ver | sion: | 7 |
| | 1 | | | | | | • | | | | • | | |
| | Biode | egrad | ation | | | | 1 | | | | | | |
| % De | egradat | tion | | Time (| days) | | N | Лethod | Evaluation | on | | Note | |
| - | | | - | | | | - | | No information available | on - | | | |
| | | | | | | | | | avaliable | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 12.3 | Bioac | cumu | ılative p | otentia | al | | | | | | | | |
| | | | • | | | cient (| log Kow | ') | | | | | |
| Valu | | | ncentrat | | pl | | °C | Method | | Evaluation | | Not | e |
| - | | - | | | _ | | _ | - | - | | | - | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Bioco | oncen | tration f | actor (| (BCF) | | | | - | - | | | |
| V | /alue | | | Speci | es | | Method | | Evaluat | tion | | Note | |
| No info | | n | No | | | No information available | | No informat | tion - | | | | |
| availab | ie | | availab | ie | | | available | | available | available | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Chro | nic ec | otoxicit | v | | | | | | | | | |
| | | | • | | | Ехр | osure | 6 . | N. 4 . 1 . 1 | | | | |
| | Valu | ie | | Do | se | | ime | Species | Method | Evaluat | tion | Not | e |
| <i>c</i> ı . | | | C. 1 | | | No | | No · · · · · · | No · · · · · · | No inforn | nation | | |
| Chronic | c toxici | ty on | tisn | LC ₅₀ | | infor availa | mation able | information available | information available | available | | - | |
| <i>C</i> I . | | | | | | No | | No | No | | . • | | |
| Chronic crustac | | • |) | EC ₅₀ | | | mation | information | information | No inforn available | nation | - | |
| | | | | | | availa | able | available | available | | | | |
| 12.4 | N 4 - 1 - 1 | 11:4 1- | | | | | | | | | | | |
| 12.4 | 1 | ility in | | ط طاحه | ibu+i | on in a | nvirans | aontal compar | tmonts: | | | | |
| , | | | predicte ation av | | | JII IN E | environn | nental compar | unents: | | | | |
| | | | ation av nsion: | anabie | | | | | | | | | |
| | | alue | 131011. | °C | | C | oncentra | ation | Meth | nod | | Not | e |



Protection.

SAFETY DATA SHEET

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|---|--------------------------------|--------------------------|--------------------------------|---------------------------------|--------------------------|--------------------------|---|------------|-----|
| Trading name: Product code: NTB-OT-X** | | SOD | DIUM T | ETRABORATE | , SOLUTION | | | | |
| | | : N | TB-OT-X** | No information | | ate: 14 ľ | November 2022 | Version: | |
| | No information available | | No information available | | | No information available | | - | |
| | | | | | | | | | |
| | Adsor | | desorption | | | | | | |
| Transpo | ort | = | coefficient 's constant | log Kow | Evap | ooration rate | Method | Note | |
| Soil-water | | lo vailable | information | No informatio n available | No information available | | No information available | - | |
| Water-air | | No information available | | No informatio n available | No info | ormation ble | No information available | - | |
| Soil-air No | | lo vailable | information | No informatio n available | No information available | | No information available | - | |
| 12.5. | This su | ubstance | | ins no compo | | | either persistent, b evels of 0.1% or high | | and |
| | 1 | | | | | | | | |
| 12.6. | Endoc | rine disr | rupting propert | ies | | | | | |
| | accord | ling to F | | 7(f) or Commi | ission De | elegated regula | to have endocrine d tion (EU) 2017/2100 | | |
| 12.7. | Other | adverse | effects | | | | | | |
| | No fur | ther rele | evant information | on available. | | | | | |
| SECTIO | N 13. D | Disposal | consideration | S | | | | | |
| 13.1 | | | ment methods | | | | | | |
| 13.1.1. | Prod | luct/Pac | :kaging disposa | · | | | | | |
| .5.1.1. | | | <u> </u> | | uthorize | d by the Minist | ry of Environmental | and Nature | |
| | | action | p - 1 - 1 - 1 - 1 - 1 | ۵ | | - , | , | | |



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| Trading name: | SODIUM TETRABORATE, SOLUTION | | | | | | | | |
|---------------|------------------------------|----------------|------------------|----------|---|--|--|--|--|
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| 13.1.2. | Waste codes/waste designatio | ns according to Law: | | | | | | | |
|------------|---|--|--|--|--|--|--|--|--|
| | Packaging that contains residual hazardous substances or is contaminated with hazardous substances | | | | | | | | |
| | | | | | | | | | |
| 13.1.3. | Waste treatment – relevant information: | | | | | | | | |
| | No information available | | | | | | | | |
| | | | | | | | | | |
| 13.1.4. | Sewage disposal – relevant info | ormation: | | | | | | | |
| | Waste must not be disposed o | f into the sewage system. | | | | | | | |
| | | | | | | | | | |
| 13.1.5. | Other disposal recommendation | ons: | | | | | | | |
| | 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. | | | | | | | | |
| 13.1.6. | Relevant Community provision | ns: | | | | | | | |
| | Disposal must be made accord | ling to official regulations. | | | | | | | |
| | | | | | | | | | |
| SECTION | 14 TRANSPORT INFORMATIO | ON CONTRACTOR OF THE CONTRACTO | | | | | | | |
| ٦ | ransporting/shipment by road (| (ADR) | | | | | | | |
| UN numb | er: | 1993 | | | | | | | |
| | r shipping name: | Flammable liquid, n.o.s. (ethanol, isopropanol) | | | | | | | |
| Transport | hazard class(es): | 3 | | | | | | | |
| Packing g | | II | | | | | | | |
| Environm | entally hazardous: | - | | | | | | | |
| Special pr | ecautions for user: | - | | | | | | | |
| 7 | ransporting/shipment by rail (R | | | | | | | | |
| UN numb | er: | 1993 | | | | | | | |
| UN prope | r shipping name: | Flammable liquid, n.o.s. (ethanol, isopropanol) | | | | | | | |
| Transport | hazard class(es): | 3 | | | | | | | |
| Packing g | | II | | | | | | | |
| | entally hazardous: | - | | | | | | | |
| | recautions for user: | - | | | | | | | |
| i | nland waterway transport (ADN) | | | | | | | | |
| UN numb | er: | 1993 | | | | | | | |
| UN prope | r shipping name: | Flammable liquid, n.o.s. (ethanol, isopropanol) | | | | | | | |
| Transport | hazard class(es): | 3 | | | | | | | |
| Packing g | roup: | ll . | | | | | | | |



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| Environmentally hazardous: | - |
|---|---|
| Special precautions for user: | - |
| Transporting/shipment by sea (IN | MDG) |
| UN number: | 1993 |
| UN proper shipping name: | Flammable liquid, n.o.s. (ethanol, isopropanol) |
| Transport hazard class(es): | 3 |
| Packing group: | П |
| Environmentally hazardous: | - |
| Special precautions for user: | - |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: | - |
| Transporting/shipment by air (IC | AO-TI/IATA-DGR) |
| UN number: | 1993 |
| UN proper shipping name: | Flammable liquid, n.o.s. (ethanol, isopropanol) |
| Transport hazard class(es): | 3 |
| Packing group: | П |
| Environmentally hazardous: | - |
| Special precautions for user: | - |
| | |
| Further information: - | |

| SECTIO | ECTION 15. Regulatory information | | | | | | | |
|--------|--|--|--|--|--|--|--|--|
| 15.1 | Safety, health and environmental regulations/legislation specific for the substance or mixture | | | | | | | |
| | EU regulations | | | | | | | |
| | Authorization and/or restrictions of use | | | | | | | |
| | Authorizations: - | | | | | | | |
| | Restrictions: - | | | | | | | |



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| | None | |
|------|--|---|
| 15.2 | Chemical safety assessme | ent |
| | National legislation: | 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 |
| | Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline) | |
| | | REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); |
| | | 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; |
| | | 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; |
| | Other EU regulations: | 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; 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; |
| | | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of |

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



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| 16.4. | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) | | | |
|----------|---|-------|---|--|
| Classifi | Classification | | Classification procedure | |
| _ | - | | - | |
| 16.5. | 5.5. Relevant H statements (numb | | ber and full text) | |
| | | 225 | Highly flammable liquid and vapor. | |
| | H: | 319 | Causes serious eye irritation. | |
| | | 336 | May cause drowsiness or dizziness. | |
| | | 360FD | May damage fertility. May damage the unborn child. | |
| 16.6. | Training advice: | | - | |
| | Further information: | | ** "X" in the product code marks different volumes (different packagings of the product) | |
| 16.7. | | | 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 |
|--|
| - |