

CONGO RED HIGHMAN KIT

The kit contains:

Congo Red reagent
Hematoxylin G2
Potassium hydroxide, solution



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

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| Trading name: | CONGO RED REAGENT | | | | |
|---------------|-------------------|----------------------|-------------|----------|---|
| Product code: | CR-OT-X** | Date of compilation: | 21 Dec 2022 | Version: | 5 |

| SECTI | ON 1: Identification of | the substance | e/mixture | and of the company/undertaking | |
|-------|--|----------------------------|--|----------------------------------|--|
| 1.1 | Product identifier | | | | |
| | Trading name: | CONGO RE | CONGO RED REAGENT | | |
| | Chemical name: | - | | | |
| | Catalogue number: | CR-OT-X** | | | |
| 1.2 | Relevant identified us | es of the subs | tance or n | nixture and uses advised against | |
| | Uses: | | For use | with Congo Red Highman kit. | |
| | 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 of the safety data sheet | | | | |
| | Supplier: | | BioGnos | t Ltd. | |
| | Address: | | Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039 | | |
| | Telephone number: | | | | |
| | Telefax.: | | | | |
| | e-mail of competent p | person: | msds@b | <u>piognost.hr</u> | |
| | National contact: | | - | | |
| 1.4 | Emergency telephone | Emergency telephone number | | | |
| | National Protection ar | nd Rescue Dire | ectorate: | 112 | |
| | Medical information: | | | +385 1 2348 342 | |
| | Other information: | | | - | |

| SECTIO | N 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 statem | nents*: |
| | Flam. Liq. 3 | | H226 | |
| | Carc. 1B | | H350 | |
| 2.1.2. | Additional information | | | |
| | - | | | |
| *For ful | l text of Hazard- and EU Hazard- | statements: see S | ECTION 16 | |
| 2.2 | Label elements | | | |
| | Product identification: | CONGO RED RE | AGENT | |
| | Identification number: | Identification number: - | | |
| | Authorization number: | - | | |



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| | Hazard pictograms: | GHS02 GHS08 | | | |
|-----|---|--|--|--|--|
| | Signal word: | Danger | | | |
| | Hazard statements: | H226 Flammable liquid and vapour. H350 May cause cancer. | | | |
| | Precautionary statements: | P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P308+P313 If exposed or concerned: Get medical advice/attention. | | | |
| | Supplemetal hazard information (EU): | - | | | |
| 2.3 | Other hazards | | | | |
| | Endocrine Disrupting Prope | Endocrine Disrupting Properties: | | | |
| | No known endocrine disrupting properties | | | | |
| | Results of PBT and vPvB ass PBT or a vPvB. | Results of PBT and vPvB assessment : According to the results of its assessment, this substance is not a PBT or a vPvB. | | | |
| | (Direct Red 28 C.I.) Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH). | | | | |

| SECTION 3. Co | 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-xxxx | 40 - 60 % | ethanol | Flam. Liq. 2; H225 | | |
| 573-58-0/ 209-358-4/ 611-027-00-8 | - | 1 – 2 % | disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) | Carc. 1B; H350 Repr. 2; H361d | | |

4.1 Description of first aid measures



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| | 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: | Rinse the oral cavity, drink 1-2 glasses of water. 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 |
| 4.2 | Most important symptoms and ef Following inhalation: | fects, both acute and delayed Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea. |
| 4.2 | | Depending on concentration and exposure time, it may lead to |
| 4.2 | Following inhalation: | Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea. Depending on concentration and exposure time, it may lead to |
| 4.2 | Following inhalation: Following skin contact: | Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea. Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking. Depending on concentration and exposure time, it may lead to |
| 4.3 | Following inhalation: Following skin contact: Following eye contact: Following ingestion: | Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea. Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking. Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain. Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, |

| SECTIO | SECTION 5. Firefighting measures | | | | |
|--------|--|---|--|--|--|
| 5.1 | Extinguishing media | | | | |
| | Suitable extinguishing media: | Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam | | | |
| | Unsuitable extinguishing media: | No information available | | | |
| 5.2 | Special hazards arising from the su | ubstance 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. | | | | |
| 5.4 | Additional information | | | | |
| | Do not contaminate the environment | ent with extinguishing media. | | | |



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| 6.1 | Personal precautions, protective 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. | |
| | Emergency procedures: | Mark the area using proper signs. | |
| 6.1.2. | For emergency responders: | | |
| | Use protective equipment; in c (see Section 8). | ase of inadequate ventilation use adequate airways protective equipment | |
| 6.2 | Environmental precautions: | | |
| | Do not dispose of in sewage, or Protection and Rescue Directo | drainage system and waterways. In case of large spillage contact National rate (NPRD) on 112. | |
| 6.3 | Methods and material for cont | ainment 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 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: | Do not use incompatible materials (see Section 10). | |
| 6.4 | Reference to other sections | | |

| SECTIO | CTION 7. Handling and storage | | |
|--------|--|--|--|
| 7.1 | Precautions for safe handling | | |
| 7.1.1. | Protection measures | | |
| | Measures to prevent fire: | Use in well ventilated storage rooms. | |
| | Measures to prevent aerosol and dust generation: | Secure proper ventilation. | |
| | Measures to protect the environment: | Prevent spilling into the sewage system and waterways. | |
| | Other measures: | - | |
| 7.1.2. | Advice on general occupational hygiene: | | |
| | Do not eat, drink or smoke in the workspace. Thoroughl | y wash hands after work and before eating. | |



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| 7.2 | Conditions for safe storage, including any inco | mpatibilities |
|-----|---|---|
| | Technical measures and storage conditions: | Keep in tightly closed and upright set containers in a well ventilated storage roomsat temperatures ranging from 15 to 25 °C. |
| | Packaging materials: | Manufacturer's original packaging. Avoid metal 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 pa | 8.1 Control parameters | | | | | | |
| Substance | | CAS No | | • | Occupational exposure limit values/short term values | | Biological limit values |
| | | | | ppm | mg/m³ | | - |
| Ethanol | | 64-17- | 5 | 1000/- | 1900/- | | - |
| | | | | | | | |
| Substance name: | - | | | | | | |
| EC No: | - | CAS No: | - | | | | |
| DNEL | | | | | | | |
| | | | | Industrial | | | |
| Route of | А | cute | | Acute | Chron | ic | Chronic |
| exposure: | effe | ct local | effec | t systemic | effect lo | cal | effect systemic |
| Oral | - | | - | | - | | - |
| Inhalation 1900 mg/m³ (ethanol) - 380 mg/m³ (ethanol) | | | | | 380 mg/m³ (ethanol) | | |
| Dermal | | | - | | - | | 343 mg/kg (ethanol) |
| Critical physical parameters: solubility, flammability, corrosivity: | | | | | | | |
| | | | | Consumer | _ | | |



Acute

effect local

Route of

exposure:

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Chronic

effect local

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Chronic

effect systemic

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Acute

effect systemic

| Oral | | - | - | | - | 87 mg/kg bw/day (ethanol) |
|---------------------------------|--|---|---|---|--|---|
| Inhalation | 1 | 950 mg/m³ (ethanol) | - | | - | 114 mg/m³ (ethanol) |
| Dermal | | - | - | | - | 206 mg/kg (ethanol) |
| PNEC | | | | | | |
| Environmental protection target | | | PNEC | | | |
| Fresh wat | er | | | 0.96 m | ıg/l (ethanol) | |
| Freshwate | er sedimer | nts | | 3.6 mg | g/kg (ethanol) | |
| Marine wa | ater | | | 0.79 m | ng/l (ethanol) | |
| Marine se | diments | | | 2.9 mg | g/kg (ethanol) | |
| Food chai | n | | | 380-72 | 20 mg/kg (ethano | ol) |
| Microorga | anisms in | sewage treatment | | 580 m | g/l (ethanol) | |
| Soil (agric | cultural) | | | 0.63 m | ıg/kg (ethanol) | |
| Air | | | | No inf | ormation availabl | e |
| 8.2 | Exposu | ure controls | | | | |
| | | | | | | |
| 8.2 8.2.1. | | ure controls priate engineering | controls | | | |
| | Appro | | | า : | • | ventilated rooms. Use personal |
| | Appro Substa | priate engineering | d measures t | nrotec | tive equipment. [| ventilated rooms. Use personal Do not eat, drink or smoke in the |
| | Appro Substa prever | priate engineering ince/mixture relate it exposure during ural measures to pr | d measures t identified us | protec es: works | tive equipment. [| Do not eat, drink or smoke in the |
| | Substa prever Structu exposu | priate engineering ince/mixture relate it exposure during ural measures to pr ure: isational measures | d measures t identified us revent | protection protection worksplant protection | tive equipment. E pace. ordance with Sect | Do not eat, drink or smoke in the sion 7. order to reduce other worker's |
| | Substa prever Structu exposu Organ exposu | priate engineering ince/mixture relate it exposure during ural measures to pr ure: isational measures | d measures t identified us revent to prevent | o protect works In according In In Influer Secure concerns | tive equipment. E pace. ordance with Sect ization of work in nce during work p | Do not eat, drink or smoke in the cion 7. order to reduce other worker's process. ce ventilation in order to keep air below permitted levels. Secure |
| | Substa prever Structu exposu Organ exposu | priate engineering ince/mixture relate it exposure during ural measures to pr ure: isational measures ure: | d measures t identified us revent to prevent event exposu | o protect works In according In In Influer Secure concerns | tive equipment. E pace. ordance with Sect ization of work in nce during work p e proper workspace ntration levels in a | Do not eat, drink or smoke in the cion 7. order to reduce other worker's process. ce ventilation in order to keep air below permitted levels. Secure |
| 8.2.1. | Substa prever Structu exposu Organ exposu Techni | priate engineering Ince/mixture relate It exposure during Irral measures to pr Irre: Isational measures Irre: Ical measures to pr | d measures to identified us revent to prevent exposurement Sales | organ influer Secure concer statior ety glasses els of concer | tive equipment. Epace. ordance with Sectification of work in a proper workspace of tration levels in a proper workspace of tration in air; proper workspace of the contraction in air; proper workspa | Do not eat, drink or smoke in the cion 7. order to reduce other worker's process. ce ventilation in order to keep air below permitted levels. Secure |
| 8.2.1. | Substa prever Structu exposu Organ exposu Techni Persor | priate engineering Ince/mixture relate It exposure during Irral measures to pr Irre: Isational measures Irre: Ical measures to pr Irral measures to pr Irral measures to pr | d measures to identified us revent to prevent exposurement Sales | organ influer Secure concer statior ety glasses els of concer | tive equipment. Epace. ordance with Sectification of work in a proper workspace of tration levels in a proper workspace of tration in air; proper workspace of the contraction in air; proper workspa | Do not eat, drink or smoke in the cion 7. Torder to reduce other worker's process. The ventilation in order to keep air below permitted levels. Secure is and showering. The ventilation in order to keep air below permitted levels. Secure is and showering. |
| 8.2.1. 8.2.2. 8.2.2.1. | Substa prever Structu exposu Organ exposu Techni Eye an | priate engineering Ince/mixture relate It exposure during Irral measures to pr Irre: Isational measures Irre: Ical measures to pr Irral measures to pr Irral measures to pr Irral measures to pr Irral protection equip | d measures to identified us revent to prevent exposurement Sales en | organ influer Secure concer station ety glasses els of concer ire face in concer station | tive equipment. Epace. ordance with Sectification of work in a proper workspace of tration levels in a proper workspace of tration in air; proper workspace of the contraction in air; proper workspa | cion 7. Torder to reduce other worker's process. To eventilation in order to keep air below permitted levels. Secure and showering. (EN 166) or visor in case of lower otective gas mask that covers the els of concentration in air. |



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| 8.2.2.3. | Respiratory protection: | Suitable mask (EN 136) or half mask (EN 140) equipped with a combined "A1 + Form" filter (EN 143) used when concentration levels exceed GVI. |
|----------|---|--|
| 8.2.2.4. | Thermal hazards: | No information available |
| 8.2.3. | Environmental exposure controls | |
| | Substance/mixture related measures to prevent exposure: | See Section 6 |
| | Structural measures to prevent exposure: | Use modern equipment. |
| | Organisational measures to prevent exposure: | Adapt the work process to the required working conditions of the workplace. |
| | Technical measures to prevent exposure: | See Section 6 |

| Information on basic physical and o | chemical properties | |
|---|---------------------------------|--------------------------|
| | Value | Method |
| Physical state: | liquid | No information available |
| Colour: | red | No information available |
| Odour/odour threshold: | biting/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: | 24 °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 |



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| 9.2 | Other information |
|-----|-------------------|
| | - |

| SECTIO | SECTION 10. Stability and reactivity | | | |
|--------|--------------------------------------|--|--|--|
| 10.1 | Reactivity: | The product is stable under normal working and storage conditions. | | |
| 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. To | oxicological information | on | | | | |
|--------------------|--------------------------|--------------|---|----------------------------|--------|---------------------------------|
| 11.1 Informa | ation on toxicological e | ffects | | | | |
| Acute t | oxicity: | | | | | |
| Route of exposure: | Method | Specie | s Dose LD ₅₀ /LC ₅₀ | or Exposure | e time | Results |
| Oral: | No information available | rat | No information available | - | | 15.200 mg/kg (Direct Red 28) |
| Dermal: | No information available | - | No information available | - | | - |
| Inhalation: | No information available | - | No information available | - | | - |
| | | | | | | |
| Specific | target organ toxicity – | - single exp | oosure (STOT SE): | | | |
| | Specific | effects | Та | Target organ | | |
| Oral: | No information av | ailable | No informa | ation available | - | |
| Dermal: | No information av | ailable/ | No informa | No information available - | | |
| Inhalation: | No information av | ailable | No informa | No information available - | | |
| | | | | | | |
| Aspirat | ion hazard: | | No information availa | able. | | |
| | | | | | | |
| Irritatio | n and corrosion | | | | | |
| | Exposure t | ime | Species Ev | aluation Me | ethod | Note |



available

dermal

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| | | | | | | | | | |
| Skin corrosion/irritatio | No on: ava | ir ailable | nformation | No information available | No inforn availa | nation ble | No information available | n _ | |
| Serious eye damage/irritation | | No information available | | No information available | No inforn availa | nation ble | No information available | n | |
| Sensitiza | ation | | | | | | | | |
| Skin sensitization | 1: | No inf | ormation a | vailable | | | | | |
| Respiratory sensi | tization: | No inf | ormation a | vailable | | | | | |
| | | i . | | | | | | | |
| Sympto | ms related | to the pl | nysical, chei | mical and toxico | logical ch | aracteri | stics | | |
| Oral exposure: | and | onsciousne | ce of strong sens ss after exposur may occur (such | e to high | er levels | | | | |
| Dermal exposure | : Def | y skin. | | | | | | | |
| Inhalation exposure: May cause eye irritation Bronchoconstriction is headache, vertigo, into concentration. | | | | ossible. Possible | symptoi | ms inclu | ide CNS sympto | ms such as | /els (|
| Eye exposure: | | atter may ons. | cause disc | omfort, stinging | sensation | n, conju | nctival redness, | corneal surfa | ice |
| Repeate | ed dose to | cicity (sub | acute, subc | chronic, chronic) | | | | | |
| | Do | se | Exposure time | Species | Met | hod | Evaluation | Note | |
| Subacute oral | No info | | No information available | No information available | | rmation lable | No information available | - | _ |
| Subacute dermal | No info | | No information available | No on information available | | rmation lable | No information available | - | |
| Subacute inhalation | No info | | No information | No on information available | | rmation lable | No information available | - | |
| Subchronic oral | No info available | | No information | No information available | | rmation lable | No information available | - | |
| Subchronic | No info | rmation | No information | No on information | No info | rmation | No information | - | |

information

available

information

available

information

available

information

available



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| Subchronic inhalation | No availa | information able | No information available | No information available | No information available | No information available | on | - |
|-----------------------|--------------------------------|---------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------|-----------|
| Chronic oral | No availa | information able | No information available | No information available | No information available | No information available | on | - |
| Chronic dermal | ermal No information available | | No information available | No information available | No information available | No information | on | - |
| Chronic inhalation | No availa | information able | No information available | No information available | No information available | No information available | on | - |
| Specific | target | organ toxicit | y – repeated ex | posure (STOT | RE): | | | |
| | | | Specific effect | :S | Target o | rgan | | Note |
| Subacute oral | | No informa | tion available | | No information | n available | - | |
| Subacute derma | l | No informa | tion available | | No information available | | - | |
| Subacute inhalat | tion | No informa | tion available | | No information available | | - | |
| Subchronic oral | | No informa | tion available | No information available | | n available | - | |
| Subchronic derm | nal | No informa | tion available | | No information available | | - | |
| Subchronic inha | lation | No informa | tion available | | No information | n available | - | |
| Chronic oral | | No informa | tion available | | No information available | | - | |
| Chronic dermal | | No informa | tion available | | No information | n available | - | |
| Chronic inhalation | on | No informa | tion available | | No information | n available | - | |
| CMR ef | fects (ca | arcinogenicity | y; mutagenicity | : reproductive | toxicity) | | | |
| Carcino | | | ,, <u>g</u> <u>,</u> , | <u> </u> | to have carcinog | enic potent | ial fo | r humans. |
| Mutage | | | | | ation available | • | | |
| Genoto | ····· | | | | ation available | | | |
| Mutage | | า vivo: | | No inform | ation available | | | |
| | | agenicity: | | No inform | ation available | | | |
| Reprod | uctive t | oxicity: | | Suspected | of damaging the | e unborn ch | ild. | |
| Summa propert | - | evaluation | of the CM | R No inform | nation available | | | |
| 11.2 Informa | ntion on | other hazard | ds. | | | | | |
| 11.2 1111011116 | | other hazart | <i>J</i> . | | | | | |



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| 12.1 Toxicity | | | | | | |
|------------------------------------|------------------|-------------------|--------------------------|--------------------------------|--------------------------------|------|
| Acute (short-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 | 4 days | No information available | No information available | No information available | - |
| 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 | - |
| | | | | | NI - | |
| Crustacea: | EC ₅₀ | 48 hours | No information available | No information available | No information available | - |
| Crustacea: Algae/aquatic plants | EC ₅₀ | 48 hours 72 hours | | information | information | - |



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| Trading name | e: | | | | | CONGO R | ED RE | AGENT | | ······································ | | |
|--|--------------------------|--|---------|-----------------------|-------------------|-------------------------------------|--------------------------------|--------------------|-------------------------|--|----------|--------------|
| Product code | e: | CR-OT-X** | | | Dat | e of compilat | ion: | 21 De | c 2022 | | Version: | |
| Marine water | No | information | availab | ole | No int | formation ble | No information available | | า | - | | |
| Fresh water | No | information | availab | ole | No int | formation ble | No in | formation able | า | - | | |
| Air | No | information | availab | le | No int | formation ble | No in | ıformatior ıble | า | - | | |
| Soil | No information available | | No int | formation ble | No in availa | nformation able | า | - | | | | |
| Biode | egrada | ntion | | | | | | | | | | |
| % Degradat | | Time | (days) | | l | Method | | Evaluatio | n | | Note | |
| No information available No information | | | No in | formation ble | No in | formation able | า | No in | formation ble | | | |
| | | | | | | | | | | | | |
| | nol-wa | lative potenti ater partition centration | | | log Kow | v) Method | | Evalua | ation | | Note | |
| | - | | - | | - | - | - | - | | - | Note | |
| Bioco | ncent | ration factor | (BCF) | | | | | | | | | |
| Value | | Spec | ies | | | Method | | Evaluation | | Note | | |
| No informatio available | | No ir available | nforma | tion | No inf availal | nformation No information available | | on | - | | | |
| | | | | | | | | | | | | |
| Chror | nic ecc | otoxicity | | | | | | | | | | |
| Valu | ıe | Do | ose | | osure ime | Species | M | 1ethod | Evalı | uation | Note | , |
| Chronic toxicity on fish LC ₅₀ inf av | | ish LC ₅₀ | | No infor availa | mation able | No information available | No information available | | No inform availal | mation - able | | |
| | | | | No | | No information | No | rmation | No inform | | _ | |



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| Product code: | CR-OT-X** | Date of compilation: | 21 Dec 2022 | Version: | 5 | | | | | |

| 12.4 | Мо | bility in so | il | | | | | | |
|------------|--------------------------------|---------------------------------------|--------------------------------|--------------------------------|--------------------------|----------------------------|--------------------------|----------|---------------------------------------|
| | Kno | own or pre | dicted distributi | on in environm | nental | compartments: | | | |
| | No | informatio | n available | | | | | | |
| | Sur | face tensic | n: | | | | | | |
| | | Value | °C | Concentra | ation | Meth | bc | | Note |
| | No information available | | No information available | No informa available | ntion | No informatio available | on _ | | |
| | Ads | sorption / o | desorption | | | | | | |
| Franspo | ort | - | coefficient /'s constant | log Kow | Eva | aporation rate | Meth | od | Note |
| Soil-water | | No available | information | No information available | No information available | | No information available | | - |
| Water- | air | No available | information | No information available | No ir availa | nformation able | | | - |
| Soil-air | • | No available | information | No information available | No ir | nformation able | No information available | | - |
| 12.5 | Da | lta af DDT | | | : | | 1 | | |
| 12.5. | | | and vPvB asses | | mnono | ents considered t | to have ende | ocrino d | isrupting properties |
| | acc | ording to I | | 7(f) or Commis | sion D | elegated regula | | | or Commission |
| 12.6. | Enc | docrine disi | rupting properti | es | | | | | |
| | acc | ording to I | | 7(f) or Commis | sion D | elegated regula | | | isrupting properties or Commission |
| 12.7. | Oth | ner adverse | e effects | | | | | | |
| | No | informatio | n available | | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | | | - | |



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| 13.1 | Waste treatment method | ls | | | | |
|-------------------------------|--|--|--|--|--|--|
| | | | | | | |
| 13.1.1. | Product/Packaging disposal: | | | | | |
| | Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. | | | | | |
| | | | | | | |
| 13.1.2. | | nations according to Law: | | | | |
| | Packaging that contains | residual hazardous substances or is contaminated with hazardous substances | | | | |
| 13.1.3. | Waste treatment – releva | nt information: | | | | |
| | No information available | | | | | |
| 13.1.4. | Sewage disposal – releva | nt information: | | | | |
| | Waste must not be dispo | sed of into the sewage system. | | | | |
| 13.1.5. | Other disposal recomme | ndations: | | | | |
| | Do not dispose of the pro authorized by the ministr | duct's remains into the sewage system. Submit the remains to the collectors in charge. Do not dispose of the packaging into the sewage system. Submit ectors authorized by the ministry in charge. | | | | |
| 13.1.6. | Relevant Community provisions: | | | | | |
| | - | | | | | |
| | | | | | | |
| SECTION | N 14 TRANSPORT INFORM | MATION | | | | |
| | Transporting/shipment by | road (ADR) | | | | |
| UN num | ber: | 1170 | | | | |
| UN prop | er shipping name: | Ethanol solution | | | | |
| Transpoi | rt hazard class(es): | 3 | | | | |
| Packing | group: | III. | | | | |
| Environn | nentally hazardous: | - | | | | |
| Special precautions for user: | | - | | | | |
| Transporting/shipment by r | | rail (RID) | | | | |
| UN number: | | 1170 | | | | |
| UN prop | er shipping name: | Ethanol solution | | | | |
| Transpoi | rt hazard class(es): | 3 | | | | |
| Packing | group: | III | | | | |
| Environn | nentally hazardous: | - | | | | |



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| Special precautions for user: | - |
|---|------------------|
| Inland waterway transport (ADN) | |
| UN number: | 1170 |
| UN proper shipping name: | Ethanol solution |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmentally hazardous: | - |
| Special precautions for user: | - |
| Transporting/shipment by sea (IN | MDG) |
| UN number: | 1170 |
| UN proper shipping name: | Ethanol solution |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| 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: | 1170 |
| UN proper shipping name: | Ethanol solution |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmentally hazardous: | - |
| Special precautions for user: | - |
| | |
| Further information: - | |

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



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| | | Description (EC) No 1007/2000 of the European Destinant and of the Council of |
|------|---------------------------------------|--|
| | | 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 (EC) 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; |
| | Other EU regulations: | 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 1999 guideline) | /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 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: | - |



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| 16.4. | | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) | | | | |
|----------|---|---|---|--|--|--|
| Classifi | assification Classification procedure | | Classification procedure | | | |
| _ | | | - | | | |
| 16.5. | Rele | evant H statements (num | ber and full text) | | | |
| | 225 Highly flammable liquid and vapour. | | Highly flammable liquid and vapour. | | | |
| | H: | 226 | Flammable liquid and vapour. | | | |
| | | 350 | May cause cancer. | | | |
| | | 361d | Suspected of damaging the unborn child. | | | |
| 16.6. | Trai | ning advice: | - | | | |
| | | | ** "X" in the product code marks different volumes (different pa the product) | | ** "X" in the product code marks different volumes (different packagings of the product) | |
| 16.7. | 16.7. Further information: | | 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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|---------------|--------------|----------------|---------------|----------|---|
| Product code: | HEMG2-OT-X** | Revision date: | 03 April 2023 | Version: | 8 |

| SECTI | ION 1 IDENTIFICATION | OF THE SUB | STANCE/MIX | CTURE AND OF THE COMPANY/UNDERTAKING | |
|-------|----------------------------------|--------------------|---|--|--|
| 1.1. | Product identifier | Product identifier | | | |
| | Trading name: | НЕМАТОХ | HEMATOXYLIN G2 | | |
| | Chemical name: | - | | | |
| | Catalogue number: | HEMG2-O | T-X** | | |
| 1.2. | Relevant identified use | es of the sub | stance or mix | ture and uses advised against | |
| | Uses: | | Hematoxyl | in according to Gill for nuclear staining. | |
| | Uses advised against: | | Only the id | lentified 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: | В | BioGnost Ltd. Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039 msds@biognost.hr | | |
| | Address: | N | | | |
| | Telephone number: | + | | | |
| | Fax no.: | + | | | |
| | e-mail of competent p | erson: <u>n</u> | | | |
| | National contact: | - | - | | |
| 1.4. | Emergency telephone | number | | | |
| | National Protection ar | nd Rescue Dir | rectorate: | 112 | |
| | Medical information: | | | +385 1 2348 342 | |
| | Medical information. | | | 1303 12340 342 | |

| SECTIO | SECTION 2 HAZARDS INFORMATION | | | | |
|----------|--|---------------------|-----------|---------------------|--|
| 2.1. | Classification of the substance or mixture | | | | |
| 2.1.1. | Classification (REGULATION (E | EC) No. 1272/2008 | (CLP) | | |
| | Hazard class and cate | gory code: | | Hazard statements*: | |
| | Acute Tox. 4 | Acute Tox. 4 H302 | | | |
| 2.1.2. | Additional information | | | | |
| | - | | | | |
| *For ful | l text of Hazard- and EU Hazard | l-statements: see S | ection 16 | | |
| 2.2. | Label elements | | | | |
| | Product identification: | HEMATOXYLIN G2 | | | |
| | Identification number: | - | | | |
| | Authorization no.: | - | | | |



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| | Hazard pictograms: | GHS07 | | | |
|------|--|--|--|--|--|
| | Signal word: | Warning | | | |
| | Hazard statements: | H302 Harmful if swallowed. | | | |
| | Precautionary statements: | P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. | | | |
| | Supplemetal hazard information (EU): | - | | | |
| 2.3. | Other hazards | | | | |
| | Endocrine Disrupting Prop | erties: | | | |
| | 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 CO | SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS | | | | | | |
|---|--|--------------------------------|------------------------|--|--|--|--|
| CAS/ EC/ Index no. | REACH Registration No | Weight % content (or range) | ldentification name | Classification according to Regulation (EC) No 1272/2008 (CLP) | | | |
| 107-21-1/ 203-473-3/ 603-027-00-1 | 01-2119456816- 28-xxxx | 25 - 45 % | ethylene glycol | Acute Tox. 4, H302 | | | |

| SECTIO | SECTION 4 FIRST AID MEASURES | | | | |
|--------|-----------------------------------|---|--|--|--|
| 4.1. | Description of first aid measures | | | | |
| | General notes: | - | | | |
| | Following inhalation: | Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician. | | | |
| | Following skin contact: | Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain. | | | |
| | Following eye contact: | Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician. | | | |



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| | Following ingestion: | | Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention. | | |
|------|--------------------------------|----------------------|--|--|--|
| | Self-protection of the first a | aider: | Treat symptomatically. | | |
| 4.2. | Most important symptoms | and eff | ects, both acute and delayed | | |
| | Following inhalation: | | lation of large amounts of vapors in inadequately ventilated perimeter cause coughing, sneezing, headache and nausea. | | |
| | Following skin contact: | _ | nt irritation. After short exposure, resorption effects are not likely. Long- n exposure may cause drying, cracking and tingling sensation of skin. | | |
| | Following eye contact: | | ct eye contact may cause slight to moderate irritation, lacrimation and ning sensation. If the symptoms persist, immediately call a physician. | | |
| | Following ingestion: | burr abdo couç | Swallowing may cause irritation of mucosa, tingling sensation in the mouburning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation. | | |
| 4.3. | Indication of any immediat | e medio | medical attention and special treatment needed | | |
| | - | | • | | |

| SECTIO | SECTION 5 FIREFIGHTING MEASURES | | | | |
|--------|---|--|--|--|--|
| 5.1. | Extinguishing media | | | | |
| | Suitable extinguishing media: Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam | | | | |
| | Unsuitable extinguishing media: water jet | | | | |
| 5.2. | Special hazards arising from the substance or mixture | | | | |
| | Hazardous 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 ignition. | | | | |
| | Do not contaminate the environment with extinguishing media. | | | | |

| SECTIO | SECTION 6 ACCIDENTAL RELEASE MEASURES | | | |
|--------|--|--|--|--|
| 6.1. | Personal precautions, protective equipment and emergency procedures | | | |
| 6.1.1. | For non-emergency personnel | | | |
| | Protective equipment: Use personal protective equipment (see Section 8). | | | |



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| | 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 (s | see Section 8). | | |
| 6.2. | Environmental precautions: | | | |
| | Do not dispose of in sewage, Protection and Rescue Directo | drainage system and waterways. In case of large spillage contact National orate (NPRD) on 112. | | |
| 6.3. | Methods and material for cor | ntainment 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 | | | |
| | 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 | TION 7 HANDLING AN 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: | Prevent spilling into the sewage system and waterways. | | | | |
| | Other measures: | | | | | |
| 7.1.2. | Advice on general occupational hygiene: | | | | | |
| • | Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating. | | | | | |
| 7.2. | Conditions for safe storage, including any incompatibilities | | | | | |



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| | 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: | - |

| SECTION 8 EXP | OSURE CON | TROLS/PER | SONAL | PROTECTION | | | |
|---------------------|---------------|-----------------|----------|--|-----------------------------|-------------------------|-----------------------------|
| 8.1. Control | parameters | | | | | | |
| Substance | | CAS No | | Occupational exposure limit values/short term values | | Biological limit values | |
| | | | | ppm | mg/m³ | | |
| Ethylene glycol | | 107-2 | 1-1 | 20/40 | 52/104 | No infor | mation available |
| | | | | | | | |
| Substance - name: | | | | | | | |
| EC No: - | | CAS No: | - | | | | |
| DNEL | | | | | | | |
| | | | | Industrial | | | |
| Route of | , | Acute | | Acute | Chron | ic | Chronic |
| exposure: | effe | ect local | effe | ect systemic | effect local | | effect systemic |
| Oral | - | | - | | - | | - |
| Inhalation | - | | - | | 35 mg/ kg (ethylene glyd | col) | |
| Dermal | - | | - | | - | | 106 mg/kg (ethylene glycol) |
| Critical physical p | oarameters: s | solubility, fla | mmabilit | ty, corrosivity: | - | | |
| | | | | Consumer | | | |



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| Product | Loue. | HEIVIGZ-UT-X*** | | Revisio | m date. | 03 April 2023 | version. o | | |
|-------------|--------------------|--|---|------------|---|--|----------------------------|--|--|
| | | 1 | | | | | 1 | | |
| Route of | | Acute | | Acut | | Chronic | Chronic | | |
| exposure | • | effect local | (| effect sys | temic | effect local | effect systemic | | |
| Oral | | - | - | | | - | - | | |
| Inhalation | | - | - | | | 7 mg/kg (ethylene glycol) | - | | |
| Dermal | | - | - | | | - | 53 mg/kg (ethylene glycol) | | |
| PNEC | | | | | | | | | |
| Environme | ental prote | ction target | | | PNEC | | | | |
| Fresh water | | | | | 10 mg/l (| (ethylene glycol) | | | |
| Freshwate | r sediment | ts | | | 37 mg/kg | g (ethylene glycol) | | | |
| Marine wa | ater | | | | 1 mg/l (e | thylene glycol) | | | |
| Marine se | diments | | | | 3.7 mg/k | g (ethylene glycol) | | | |
| Food chai | n | | | | No information available | | | | |
| Microorga | anisms in s | ewage treatment | | | 199.5 mg/l (ethylene glycol) | | | | |
| Soil (agric | ultural) | | | | 1.53 mg/kg (ethylene glycol) | | | | |
| Air | | | | | No infor | mation available | | | |
| | | | | | | | | | |
| 8.2. | Exposur | e controls | | | | | | | |
| 8.2.1. | Enginee | ering measures | | | | | | | |
| | measure | ASSIITAS TO DEGLIANT AVDOSIITA | | | Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace. | | | | |
| | | ructural measures to prevent oposure: Reposure: Reposure: Reposures to Organisational measures to Description of the Organisation of the Organisati | | | No information available Organization of work in order to reduce other worker's influence during work process. | | | | |
| | _ | | | | | | | | |
| | Technic exposur | al measures to pre e: | vent | | | rkspace ventilation in c els in air below permitt | • | | |
| 8.2.2. | Persona | l protection equip | ment | | | | | | |
| 8.2.2.1. | Eye and | face protection: | Safety glasses that stick to face (preventing splashing) (visor. | | | ing splashing) (EN 166) o | | | |
| 8.2.2.2. | Skin pro | otection | | | | | | | |
| | Hand pı | Protective glove Hand protection: | | | naterial: ni | according to standard | I EN 374. | | |
| | | | | | Glove thickness: ≥0.11 mm Break through time: >480 min | | | | |



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| | 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 fo | Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI. | | | |
| 8.2.2.4. | Thermal hazards: | No inf | ormation available | | | |
| 8.2.3. | Environmental exposure | controls | | | | |
| | Substance/mixture related measures to prevent exposure: | | See Section 6 | | | |
| Structural measures to prevexposure: | | 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 | | | |

| 1. | Information on basic physical and che | mical properties | |
|----|---|--|--------------------------|
| | | Value | Method |
| | Physical state: | liquid | No information available |
| | Color: | dark red | No information available |
| | Odour/odour threshold: | very mild vinegar odour/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 |
| | рН: | 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 |



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| | 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: | With strong oxidants, sodium-hydroxide, sulfuric acid, aluminum. | | | |
| 10.4. | Conditions to avoid: | Sources of heat, sparks, and ignition. | | | |
| 10.5. | Incompatible materials: | Aluminum. | | | |
| 10.6. | Hazardous decomposition products: | No information available. | | | |

| | OLOGICAL INFORMA | | | | |
|----------------------|--------------------------|----------------|---|------------------|----------------------------------|
| 11.1. Information | on hazard classes as | defined in Reg | Julation (EC) No 1272 | 2/2008 | |
| Acute toxici | ty: | | | | |
| Route of exposure: | Method | Species | Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture} | Exposure time | Results |
| Oral exposure: | anhydrous (ECHA) | rabbit | LD ₅₀ | - | 7.712 mg/kg (ethylene glycol) |
| Dermal exposure: | anhydrous (ECHA) | rat | LD ₅₀ | - | >3.500mg/kg (ethylene glycol) |
| Inhalation exposure: | No information available | - | LC ₅₀ | - | - |
| | | | | | |
| Specific targ | get organ toxicity – si | ngle exposure | (STOT SE): | | |
| Specific | | c effects | Target o | organ | Note |
| Oral exposure: | No information | available | No information | n available | - |
| Dermal exposure: | No information | available | No information | n available | - |
| Inhalation exposure: | No information | available | No information available | | _ |

| Respiratory | Respiratory irritation: | | No information available | | | | | |
|---------------|-------------------------|---------|--------------------------|--------|------|--|--|--|
| | | | | | | | | |
| Irritation an | d corrosion | | | | | | | |
| | Exposure time | Species | Evaluation | Method | Note | | | |



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| Trading name: | | | HEMAT | OXYLIN G2 | | |
|------------------------|--------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|--------------|
| Product code: | HEMG2-OT-X | ** Re | vision date: | 03 April 202 | Wersion: | 8 |
| | | | | | | |
| Skin irritation: | - | rabb | it - | - | Slight irritation glycol) | on (ethylene |
| Eye irritation: | 24 h | rabb | it - | - | Slight irritation glycol) | on (ethylene |
| Sensitiza | ation | | | | | |
| Dermal exposure | : No information | available | | | | |
| Inhalation exposure: | No information | No information available | | | | |
| Sympton | ms related to the p | hysical, chemic | al and toxicolo | gical characterist | ics | |
| Oral exposure: | No informat | ion available | | | | |
| Dermal exposure | : No informat | ion available | | | | |
| Inhalation exposu | ure: No informat | ion available | | | | |
| Eye exposure: | Causes serio | us eye damage | 9 | | | |
| | | | | | | |
| Repeate | d dose toxicity (sub | oacute, subchro | onic, chronic) | i i | | |
| | 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 inhalation | No information available | No information available | No information available | No information available | No information available | - |
| Chronic oral | No information available | No information available | No information available | No information available | No information available | - |



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| Trading name: | | | | HEN | ЛАТ | OXYLIN G2 | | rage i | U OT 16 |
|--------------------|----------------------------------|----------------------------|--------------------------------|---|--------|--------------------------------|--------------------------|----------|------------|
| Product code: | HF | MG2-OT-X* | * R | evision dat | | 03 April 2023 | 3 Ve | ersion: | 8 |
| 1 Todact code. | 115 | INIGE OT X | 10 | CVISIOTI dat | .с. | 03 April 202. | , vc | .131011. | <u> </u> |
| Chronic dermal | No availa | information able | No information available | | | No information available | No inform available | nation | - |
| Chronic inhalation | No information i | | No information available | formation information | | No information available | No information available | | - |
| Specific | target | organ toxicit | y – repeated (| exposure (S | TOT I | RE). | | | |
| Specific | target | | pecific effects | | | Target orga | ın | | Note |
| Subacute oral | • | | | | No | information avail | | _ | |
| Subacute derma | | | | | | information avail | | _ | |
| Subacute inhala | | | tion available | | | information avail | | - | |
| Subchronic oral | | No informa | ition available | <u> </u> | | information avail | | - | |
| Subchronic dern | Subchronic dermal No information | | | | | able | - | | |
| Subchronic inha | lation | No informa | tion available | n available No informatio | | information avail | vailable - | | |
| Chronic oral | | No informa | tion available | n available No ir | | No information available | | - | |
| Chronic dermal | | No informa | tion available | n available No information available | | able | - | | |
| Chronic inhalation | on | No informa | tion available | n available No information av | | information avail | able | - | |
| | | | | | | | | | |
| CMR ef | fects (c | arcinogenicit | y, mutagenici | ty, reproduc | tive t | oxicity) | | | |
| Carcino | genicit | y: | Current | studies on t | est a | nimals did not in | dicate carci | nogeni | c effects. |
| Mutage | enicity <i>i</i> | n-vitro: | Current | <i>in vitro</i> te | sts d | id not indicate r | nutagenic e | effects. | |
| Genoto | xicity: | | No infor | mation ava | ilable | | | | |
| Mutage | enicity <i>i</i> | n-vivo: | Current | in vivo tes | ts di | d not indicate n | nutagenic e | ffects. | |
| Germ c | ell mut | agenicity: | | mation ava | | | | | |
| Reprod | uctive t | toxicity: | No toxi organs. | No toxicity on reproductive organs was determined in reproductive organs. | | | | | |
| Summa | iry of ev | valuation of t | ne CMR prope | erties: - | | | | | |
| 11.2. Informa | ation or | n other hazard | ds: | | | | | | |
| 11.2.1. Endocr | ine disr | upting prope | rties: | | | | | | |
| | nown ties tha | endocrine t affect huma | disrupting n health. | | | | | | |
| 11.2.2. Other is | nforma | tion: | | | | | | | |
| _ | | | | | | | | | |



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| Trading name: | | HEMATOXYLIN G2 | | | | |
|---------------|--------------|----------------|---------------|----------|---|--|
| Product code: | HEMG2-OT-X** | Revision date: | 03 April 2023 | Version: | 8 | |

| 12.1. Toxici | tv | | | | | | | | | |
|--------------------------|----------|------------------|----------------|----------------|---|--------------------------------|----------------------------|--------------------------|-----------------------|------|
| Acute (short-te | | Dose | Exposu time | | Species | N | 1ethod | Evaluat | ion | Note |
| Fish | | LC ₅₀ | 96 hou | rs | Fish | | No ormation vailable | 72.860 r (ethylene | • | - |
| Crustacea: | | EC ₅₀ | 48 hou | rs | water flea | | No ormation vailable | >100 m (ethylene | _ | _ |
| Algae/aquatic | plants | IC ₅₀ | 8 days | | algae | | No ormation vailable | 6.500-13.00 (ethylene | - | _ |
| Microorganism | าร | LC ₅₀ | 72 hou | rs | - | - | | - | | _ |
| Chronic toxicit | y | Dose | Exposu time | | Species | Ν | 1ethod | Evaluat | iion | Note |
| Fish | | LC ₅₀ | 96 hou | rs | intormation | | No informa available | ition | - | |
| Crustacea: | | EC ₅₀ | 48 hou | rs | No information available | No information available | | No informa available | ition | _ |
| Algae/aquatic | plants | IC ₅₀ | 72 hours | | No information available | No information available | | No information available | - | |
| Other organism | ns | - | - | | _ , | | - | | | _ |
| | ic degra | | | | | | | | | |
| | | radation ha | | | Method | | N | Evaluation | | Note |
| Marine water Fresh water | | ormation av | | | information available information available | | | mation avail | | - |
| Air | | ormation av | | | information available information available | | | mation avail | | - |
| Soil | | ormation av | | | information avail | | | mation avail | | _ |
| | 140 1111 | | anabic | 110 | andiniauon avall | abic | TWO ITHIO | mation avail | ubic | |
| Biode | gradati | on | | | | | | | | |
| % Degradatio | | Time (day | s) | | Method | | Evaluat | ion | No | ote |
| No information | n No | | mation | No ii avail | nformation able | | o informa ⁄ailable | | o informat ailable | ion |



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| Tradin | g name: | ame: HEMATOXYLIN G2 | | | | | | | | | | |
|--------------------|---------------------|---------------------|------------------|------------|----------------------|----------------------------|-------------------|---------------------------|-----------------------|----------|------|--|
| Produc | ct code: | HEMO | G2-OT- | X** | Rev | ision da | ate: | 03 April 202 | 23 | Version: | 8 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | : | | | | | | | | | | | |
| 12.3. | Bioaccum | ulative p | otentia | l | | | | | | | | |
| | Partition o | coefficie | nt: n-oct | tanol/wa | ter (log K | (ow): | | | | 9 | | |
| Valu | іе Со | ncentra | tion | рН | °C | Мє | ethod | Evalu | ation | | Note | |
| - | No | inform | nation | _ | - | No info | | | nation | _ | | |
| | avail | able | | | | availabl | e | available | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | . | | | | | | | | | |
| | Bioconcer | ntration | | | | NA -1 | | | | | N | |
| | /alue | | Specie | | | Method | | Evaluation | | Note | | |
| No into availab | ormation le | No availal | | ormation | n No int availal | formatio ble | n | No informati available | on No informavailable | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | Chronic e | cotovicit | 7/ | | | | | | | | | |
| | | COTOXICI | -y | F | kposure | 8 8 9 9 9 9 | | | | | | |
| | Value | | Dos | e | time | Spe | ecies | Method | Eva | luation | Note | |
| | | | | No | | No | | No | No infe | ormation | | |
| Chronic | c toxicity on | fish | LC ₅₀ | | ormation | | nation | information | availab | | - | |
| | | | | | ilable | availa | ible | available | | | | |
| | c toxicity on | | EC ₅₀ | No info | ormation | No inforr | nation | No inf | | ormation | _ | |
| rustac | ea (<i>Daphnic</i> | 7) | LC50 | | ilable | availa | | available | availab | le | | |
| | | | | : | | | | : | • | | : | |
| 12.4. | Mobility in | n soil | | | | | | | | | | |
| | Known or | predicte | ed distri | bution ir | environr | mental c | ompart | ments: | | | | |
| | No inform | nation av | /ailable | | | | | | | | | |
| | Surface te | nsion: | | | | | | | | | | |
| | Value | | °C | | Concentr | ation | | Method | | N | ote | |
| | No | No |) | | | | N | | | | | |
| | information | | ormatio | n | o inform vailable | ation | No int availat | ormation ale | - | | | |
| | available | av | ailable | а | vanable | | avandi | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |



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| | Adsorption / desorption | | | | |
|-------------------------------|--|--|--------------------------|--------------------------|------------|
| Transpo | A/D coefficient Henry's constan | log Kow | Evaporation rate | Method | Note |
| Soil-wat | ter No informa | | | No information available | - |
| Water-a | ir No informa available | tion No information available | No information available | No information available | - |
| Soil-air | No informa available | tion No information available | No information available | No information available | - |
| 12.5. | Results of PBT and vPvB | accecement | | | |
| 12.3. | Based on available data, | | contain any PRT or v | /PvB substances | |
| | basea on available data, | and product does not | contain any i bi of v | vo sabstances. | |
| 12.6. | Endocrine disrupting pro | perties | | | |
| | No known endocrine dis | | t affect the environn | nent. | |
| | | 1 31 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | | |
| | | | | | |
| 12.7. | Other adverse effects | | | | |
| 12.7. | Other adverse effects No adverse effects are e | xpected. | | | |
| 12.7. | | xpected. | | | |
| | | · | | | |
| | No adverse effects are e | ERATIONS | | | |
| SECTIO | No adverse effects are e | ERATIONS | | | |
| SECTIO | No adverse effects are e | ERATIONS ods | | | |
| SECTION 13.1. | No adverse effects are e | erations ods posal: | orized by the Ministr | y of Environmental | and Nature |
| SECTION 13.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to | erations ods posal: the legal person author | • | y of Environmental | and Nature |
| SECTIO I 13.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to Protection. | erations ods posal: the legal person authorisignations according to | • | y of Environmental | and Nature |
| SECTIO I 13.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to Protection. Waste codes/waste de | erations ods posal: the legal person authorisignations according to | • | y of Environmental | and Nature |
| SECTIO I 13.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to Protection. Waste codes/waste de | ERATIONS ods posal: the legal person authorisignations according to | • | y of Environmental | and Nature |
| SECTIO I 13.1. 13.1.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to Protection. Waste codes/waste de No information availab | erations ods posal: the legal person authorising to the legal | • | y of Environmental | and Nature |
| SECTIO I 13.1. 13.1.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to Protection. Waste codes/waste de No information availab Waste treatment – rele | erations ods posal: the legal person authorising to the legal | • | y of Environmental | and Nature |
| SECTIO I 13.1. 13.1.1. | No adverse effects are e N 13 DISPOSAL CONSID Waste treatment meth Product/Packaging dis Submit for disposal to Protection. Waste codes/waste de No information availab Waste treatment – rele | erations ods posal: the legal person authorisignations according to the legal person authorise signations according to the legal person authorise signation according to the legal person according to the legal person authorise signation according to the legal person accor | • | y of Environmental | and Nature |



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| 13.1.5. | Other disposal recomme | endations: |
|-----------|---------------------------|--|
| | authorized by the minist | roduct's remains into the sewage system. Submit the remains to the collectors ry in charge. Do not dispose of the packaging into the sewage system. Submit lectors authorized by the ministry in charge. Do not dispose of in places where |
| 13.1.6. | Relevant Community pro | ovisions: |
| | - | |
| | • | |
| SECTION | I 14 TRANSPORT INFORM | MATION |
| | Transporting/shipment by | road (ADR) |
| UN num | ber: | Not subject to transport regulations. |
| UN prop | er shipping name: | - |
| Transpor | t hazard class(es): | - |
| Packing | group: | - |
| Environn | nentally hazardous: | - |
| Special p | recautions for user: | - |
| | Transporting/shipment by | rail (RID) |
| UN num | ber: | Not subject to transport regulations. |
| UN prop | er shipping name: | - |
| Transpor | t hazard class(es): | - |
| Packing | group: | - |
| Environn | nentally hazardous: | - |
| Special p | recautions for user: | - |
| | Inland waterway transport | (ADN) |
| UN num | ber: | Not subject to transport regulations. |
| UN prop | er shipping name: | - |
| Transpor | t hazard class(es): | - |
| Packing | group: | - |
| Environn | nentally hazardous: | - |
| Special p | recautions for user: | - |
| | Transporting/shipment by | sea (IMDG) |
| UN num | ber: | Not subject to transport regulations. |
| UN prop | er shipping name: | - |
| Transpor | t hazard class(es): | - |
| Packing | group: | - |
| Environn | nentally hazardous: | - |



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| Special precautions for user: | - |
|-------------------------------|--|
| Transporting/shipment by | air (ICAO-TI/IATA-DGR) |
| UN number: | Not subject to transport regulations. |
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmentally hazardous: | - |
| Special precautions for user: | - |
| | |
| Further information: The prod | duct is not subject to classification. |

| 15.1. | Safety, health and environmental regulations/legislation specific for the substance or mixture 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 1999/13/EC about limitation of emissions of volatile organic compguideline) | | 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 | |



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

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| 15.2. | Chemical safety assessment |
|-------|----------------------------|
| | None |

| SECTIO | TION 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 1272/2008 (CLP) | used to derive the classification for mixture according to Regulation (EC) | | | |
| Classifi | cation | Classification procedure | | | |
| _ | | - | | | |
| 16.5. | Relevant H statements (numb | er and full text) | | | |
| | H: 302 | Harmful if swallowed. | | | |
| 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: | POTASSIUM HYDROXIDE, SOLUTION | | | | |
|---------------|-------------------------------|----------------------|------------------|----------|---|
| Product code: | KHO-OT-X** | Date of compilation: | 14 November 2022 | Version: | 5 |

| 1.1. | ON 1. Identification of the substance/mixture and of the company/undertaking Product identifier | | | | |
|------|--|----------------------|---|--------------------------------|--|
| 1.1. | | POTASSIUM HYD | ROXIDE | NAIDE SOLLITION | |
| | Chemical name: - | OTASSIOWITTD | NONIDE, | JOLOTION | |
| | | (HO-OT-X** | | | |
| 1.2. | Relevant identified uses of the substance or mixture and uses advised against | | | | |
| | Uses: | | | 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 and there is no reason to use it for other purposes. | | |
| 1.3. | Details of the supplier of the safety data sheet | | | | |
| | Supplier: BioGno | | ost Ltd. | | |
| | Address: | Medjug | gorska 59, Zagreb | | |
| | Telephone number: | +385 1 | 1 2409997 | | |
| | Telefax: | +385 1 | 1 2404039 | | |
| | e-mail of competent pe | erson: <u>msds@l</u> | <u>biognost</u> | iognost.hr | |
| | National contact: | National contact: | | | |
| 1.4. | Emergency telephone numbers | | | | |
| | National Protection and Rescue Directo | | rate: | 112 | |
| | Medical information: | | | +385 1 2348 342 | |
| | Other information: | | | - | |

| SECTIO | N 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 ca | itegory code: | Hazard statement*: |
| | Skin Irr. 2 | | H315 |
| | Eye Irr. 2 | | H319 |
| 2.1.2. | Additional information | | |
| | - | | |
| *For the | e full text of H and EUH phras | ses see Section 16. | |
| 2.2. | Label elements | | |
| | Product identification: | POTASSIUM HY | DROXIDE, SOLUTION |
| | Identification number: - | | |
| | Authorisation number: - | | |



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| | Hazard pictograms: | GHS07 | |
|------|--------------------------------------|--|--|
| | Signal word: | Warning | |
| | Hazard statement: | H315 Causes skin irritation H319 Causes serious eye irritation. | |
| | Precautionary statement: | P280 Wear protective gloves/protective clothing/eye/protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention. | |
| | Supplemetal hazard information (EU): | - | |
| 2.3. | Other hazards | | |
| | | tains no components considered to be either persistent, bioaccumulative and and very bioaccumulative (vPvB) at levels of 0.1% or higher. | |

| SECTION 3. Co | 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) | |
| 1310-58-3 215-181-3 019-002-00-8 | - | 1 - 2 % | potassium hydroxide | Met. Corr. 1; H290 Ac. Tox. 4; H302 Skin Corr. 1A; H314 | |

| SECTIO | SECTION 4. First aid measures | | | |
|--------|-------------------------------|--|--|--|
| 4.1. | Description of first aid me | Description of first aid measures | | |
| | General notes: | Move out of dangerous area. Show this safety data sheet to the doctor and first responders. | | |
| | Following inhalation: | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical advice. | | |
| | Following skin contact: | Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice. | | |



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|---------------|-------------------------------|----------------------|------------------|----------|---|
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| | Following eye contact: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice. | | | |
|----------------------|---|---|--|--|--|
| Following ingestion: | | Never give anything by mouth to an unconscious person. Rinse mouth with water. | | | |
| | Self-protection of the first aider | - | | | |
| 4.2. | Most important symptoms and effects, both acute and delayed | | | | |
| | Following inhalation: | According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested. | | | |
| | Following skin contact: | According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested. | | | |
| | Following eye contact: | According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested. | | | |
| Following ingestion: | | According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested. | | | |
| 4.3. | Indication of any immedi | ate medical attention and special treatment needed | | | |
| | Treat symptomatically. | | | | |

| SECTIO | SECTION 5. Firefighting measures | | | | | |
|--------|--|---|--|--|--|--|
| 5.1. | Extinguishing media | | | | | |
| | Suitable extinguishing media: | Use dry chemical, CO ₂ , water spray (FOG) or foam. | | | | |
| | Unsuitable extinguishing media: | Avoid solid water stream as it may scatter and spread fire. | | | | |
| 5.2. | Special hazards arising from the su | bstance or mixture | | | | |
| | Hazardous by products of fire: | Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations). | | | | |
| 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 | | | | | |
| | Heating may cause container crack Do not contaminate the environment | ing due to increase in pressure. Remove sources of heat and ignition. ent with extinguishing media. | | | | |

| SECTIO | SECTION 6. Accidental release measures | | | |
|--------|---|---|--|--|
| 6.1. | Personal precautions, protective eq | Personal precautions, protective equipment and emergency procedures | | |
| 6.1.1. | For non-emergency personnel | | | |
| | Protective equipment: Use suitable personal protective equipment (see Section 8). | | | |



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| | Accident prevention methods | Evacuate members of all non-essential personnel and those members without protective equipment. | | | | |
|--------|--|--|--|--|--|--|
| | Emergency procedures: | ocedures: Mark the area using proper signs. | | | | |
| 6.1.2. | For emergency responders: | | | | | |
| | Use protective equipment; in (see Section 8). | 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, Protection and Rescue Direct | drainage system and waterways. In case of large spillage contact National orate (NPRD) on 112. | | | | |
| 6.3. | Methods and materials for co | ontainment and cleaning up | | | | |
| 6.3.1. | Bunding, covering of drains; capping procedures: | Sand or clay barriers. | | | | |
| 6.3.2. | Cleaning up: | After removing the product, use water to wash the work space and used materials. | | | | |
| 6.3.3. | Other information: | No information available. | | | | |
| 6.4. | Reference to other sections | | | | | |
| | - | | | | | |

| SECTIO | CTION 7. Handling and storage | | | | | | |
|--------|--|---------------|--|--|--|--|--|
| 7.1. | Precautions for safe handling | | | | | | |
| 7.1.1. | Protection measures | | | | | | |
| | Measures to prevent fire: | | Use in well ventilated storage rooms. Refer to the manufacturer's recommendations. | | | | |
| | 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: | | - | | | | |
| 7.1.2. | Advice on general occupational hygiene: | | | | | | |
| | Do not eat, drink or smoke in the workspace. The | noroughly w | ash hands after work and before eating. | | | | |
| 7.2. | Conditions for safe storage, including any incor | npatibilities | | | | | |
| | Technical measures and storage conditions: | • | ightly closed and upright set containers in a ilated storage rooms at temperatures ranging to 25 °C. | | | | |
| | Packaging materials: | Manufact | turer's original packaging. | | | | |
| | Requirements for storage rooms and vessels: | Keep awa | ay from food and drink. Keep the containers osed. | | | | |



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Chronic effect

The storage must be made of hard material; floors

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| | Advid | ces for | es for storage equipment: | | | | must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation. | | | |
|----------|---------------------------------------|---------------------|---------------------------|-------------------------------|---------|-----------------------------|--|-------------|-------------------------|----------------|
| | Furth | er info | ormatio | mation 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. | Spec | Specific end use(s) | | | | | | | | |
| | Recommendations: | | | | - | | | | | |
| | Industrial sector specific solutions: | | | | - | | | | | |
| | | | | | | | | | | |
| SECTIO | N 8. E | (POSL | JRE CO | NTROLS / P | ERSON A | AL PROTI | ECTIO | N | | |
| 8.1. | Cont | rol pa | rameter | 'S | | T . | | | | |
| | | | | | | Occupational exposure limit | | | | |
| | Substa | ince | | CAS No | | values/short term values | | | Biological limit values | |
| | | | | | | ppr | n | mg/m³ | | |
| - | | | | - | | - | | - | | - |
| | | | | | | | | | | |
| Substar | nce: | - | | 1 | | | 1 | | | |
| EC No: | | - | | CAS No: | - | | | | | |
| DNEL | | | | | | | | | | |
| | | | | | | Indu | strial | | | |
| Poute o | of evno | ura. | Acu | te effect | Ac | ute effect | : | Chronic eff | ect | Chronic effect |
| Route C | Route of exposure: | | | local | S | ystemic | | local | | systemic |
| Oral | Oral - | | - | | - | | | - | | - |
| Inhalati | Inhalation | | | | - | | - | | | |
| Dermal | | | - | | - | | | | | |
| Critical | physica | l para | meters: | solubility, fla | ammabil | ity, corro | sivity: | - | | |
| _ | | | | | | Cons | umer | | | |

Chronic effect Acute effect Acute effect Route of exposure: local systemic local

| Noute of exposure. | local | systemic | local | systemic |
|--------------------|-------|----------|-------|----------|
| Oral | - | - | - | - |
| Inhalation | - | - | - | - |
| Dermal | - | - | - | - |

PNEC

PNEC Environmental protection target



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| Fresh wat | ter | N | No information available | | |
|------------------------|--|----------------------|---|--|--|
| Freshwate | er sediments | N | lo information available | | |
| Marine w | ater | N | lo information available | | |
| Marine se | ediments | N | lo information available | | |
| Food cha | in | N | lo information available | | |
| Microorg | anisms in sewage treatment | N | lo information available | | |
| Soil (agric | cultural) | N | lo information available | | |
| Air | | N | lo information available | | |
| | | | | | |
| 8.2. Exposure controls | | | | | |
| 8.2.1. | Appropriate engineering controls | | | | |
| | Substance/mixture related measu to prevent exposure during ident uses: | fied Use | Use personal protective equipment. Do not eat, drink or smoke in the workspace. | | |
| | Structural measures to prevent exposure: | Noi | No information available Organization of work in order to reduce other worker's influence during work process. Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. | | |
| | Organisational measures to preve exposure: | - | | | |
| | Technical measures to prevent exposure: | | | | |
| 8.2.2. | Personal protection equipment: | | | | |
| 8.2.2.1. | Eye and face protection: | | ety glasses tested and approved under appropriate dards such as EN 166(EU). | | |
| 8.2.2.2. | Skin protection: | | | | |
| | Hand protection: | glov | dle with chemical resistant gloves. The selected protective res have to satisfy the specifications of EU Directive 586/EEC and the standard EN 374 derived from it. | | |
| | Other skin protection: | No s | specific protective equipment required. | | |
| 8.2.2.3. | | | when overexposure potential. Improper use of respirators angerous. | | |
| 8.2.2.4. | Thermal hazards: | No i | information available | | |
| 8.2.3. | Environmental exposure controls | | | | |
| | Substance/mixture related measures to prevent exposure: | See Sectio | n 6 | | |
| | Structural measures to prevent exposure: | Use mode | rn equipment. | | |
| | Organisational measures to prevent exposure: | Adapt the workplace. | t the work process to the required working conditions of the place. | | |



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| Technical measures to prevent | See Section 6 |
|-------------------------------|---------------|
| exposure: | See Section 0 |

| 9.1. | Information on basic physical | and chemical properties | |
|------|---|--------------------------|--------------------------|
| | | Value | Method |
| | Physical state: | liquid | No information available |
| | Colour: | colourless | 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 n-octanol/water (log value): | No information available | No information available |
| | Vapour pressure: | No information available | No information available |
| | Density and/or relative density | No information available | No information available |
| | Relative vapour density: | No information available | No information available |
| | Particle characteristics: | No information available | No information available |
| 9.2. | Other information | | |

| SECTION 10. Stability and reactivity | | | | | | |
|--------------------------------------|-------------------------------------|---|--|--|--|--|
| 10.1. | Reactivity: | Not reactive under normal conditions. | | | | |
| 10.2. | Chemical stability: | The product is chemically stable under standard ambient conditions of storing and using (room temperature). | | | | |
| 10.3. | Possibility of hazardous reactions: | No information available. | | | | |



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| 10.4. | Conditions to avoid: | Contact with incompatible materials and temperature extremes. |
|-------|-----------------------------------|--|
| 10.5. | Incompatible materials: | Strong oxidizers. |
| 10.6. | Hazardous decomposition products: | Does not decompose under normal conditions. During fire, thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (as asphyxiant as sufficient concentrations). |

| 11.1. | Informati | on on toxicological eff | ects | | | | |
|--|---|--------------------------|-------------------|---|--------------------------|-------------------------|---------|
| | Acute tox | | | | | | |
| Route o | of | Method | Species | Effect Do LD ₅₀ /L ATE _n | se C ₅₀ or | Exposure time | Results |
| Oral: | | No information available | - | N inform avail | nation | - | - |
| Dermal | : | No information available | - | N inform avail | nation | - | - |
| Inhalati | on: | No information available | - | N inform avail | nation | - | - |
| | Specific t | arget organ toxicity - s | single exposure (| (STOT-SE): | 1 | : | |
| | | Spec | ific effects | | Target | organ | Note |
| Oral: | | No information availa | able | | - | - | |
| Dermal | • | No information availa | able | | - | - | |
| Inhalati | on: | No information availa | able | | - | - | _ |
| | Aspiratio | n hazard: | - | | | | |
| | Irritation | and corrosion | | | | | |
| | | Exposure t | ime Spe | cies | Evaluatio | n Metho | od Note |
| Skin corrosion/irritation: No information available | | | - | | - | mild skin irritation | |
| | Serious irritation to eyes: No information available | | | | | | |



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| Ė | | | | | | | |
|----------------------------|------------|------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------|
| | tization | | | | | | |
| Skin sensitizatio | n: N | lo inform | ation available. | | | | |
| Respiratory sensitization: | ٨ | lo inform | ation available. | | | | |
| | | | | | | | |
| Symp | toms relat | ted to ph | ysical, chemical, | , and toxicologic | al properties | | |
| Oral exposure: | | No kno | own specific sym | nptoms. | | | |
| Dermal exposur | e: | No kno | own specific sym | nptoms. May cau | use skin irritation | ٦. | |
| Inhalation expo | sure: | No kno | own specific syn | nptoms. | | | |
| Eye exposure: | | No kno | own specific syn | nptoms. May cau | use mild eye irrit | ation. | |
| | | | | | | | |
| Repea | ated dose | toxicity (| subacute, subch | nronic, chronic) | - | | |
| | Do | se | Exposure time | Species | Method | Evaluation | Note |
| Subacute oral | No info | | No information available | No information available | No information available | No information available | No information available |
| Subacute dermal | No info | | No information available | No information available | No information available | No information available | No information available |
| Subacute inhalation | No info | | No information available | No information available | No information available | No information available | No information available |
| Subchronic oral | No info | | No information available | No information available | No information available | No information available | No information available |
| Subchronic dermal | No info | | No information available | No information available | No information available | No information available | No information available |
| Subchronic inhalation | No info | | No information available | No information available | No information available | No information available | No information available |
| Chronic oral | No info | | No information available | No information available | No information available | No information available | No information available |
| Chronic dermal | No info | | No information available | 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 informati available | on | No information available | No informatio available | on | No information available |
|-----------------------|------------------------------|--------------------------------|------------------------------|--|--------------------------------|-------------------------------|--------------------------|--------------------------|
| Spe | ecific target organ t | oxicity - repeated | d exposure | (STOT | Γ-RE): | | | |
| , | | Specific ef | fects | | Target org | an | | Note |
| Subacute ora | I | No information a | available | No | information av | ailable | | information ilable |
| Subacute der | mal | No information a | available | No | information av | ailable | | information ilable |
| Subacute inh | alation | No information a | available | No | information av | ailable | | information ilable |
| Subchronic o | ral | No information a | available | No | information av | ailable | | information ilable |
| Subchronic d | ermal | No information a | available | No information available | | ailable | No information available | |
| Subchronic inhalation | | No information available | | No information available | | ailable | No information available | |
| Chronic oral | | No information available | | No information available | | ailable | No information available | |
| Chronic derm | nal | No information available | | Nc | No information available | | No information available | |
| Chronic inhal | ation | o information available | | No information available | | ailable | | information ilable |
| CM | IR effects (carcinog | onicity mutagoni | city roprod | uctiv | a toxicity) | | | |
| | | enicity, mutagem | | | vailable data, th | e classification | on cr | iteria are not |
| Car | cinogenicity: | | met. | | | | | |
| Mu | itagenicity in-vitro: | | Based met. | Based on available data, the classification criteria are not | | | | |
| Ge | notoxicity: | | Based met. | on a | vailable data, th | e classification | on cr | iteria are not |
| Mu | itagenicity <i>in-vivo</i> : | | met. | | vailable data, th | | | |
| Ge | rm cell mutagenicit | y: | met. | | vailable data, th | | | |
| Rep | productive toxicity: | | Based met. | on a | vailable data, th | e classification | on cr | iteria are not |
| | mmary of evalua | tion of the C | MR No in | forma | ation available | | | |



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| 11.2. | Information on other hazards: |
|---------|--|
| 11.2.1. | Endocrine disrupting properties: |
| | No known endocrine disrupting properties that affect human health. |
| 11.2.2. | Other information: |
| | - |

| 12.1. To | xicity | | | | | | | |
|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------|-----------------|------|
| Acute (short- toxicity | -term) | Dose | Exposu time | re Sp | oecies | Method | Evaluation | Note |
| Fish | | LC ₅₀ | 96 hours | - | | _ | - | _ |
| Crustacea: | | EC ₅₀ | 48 hours | - | | _ | - | - |
| Algae/aquati | c plants: | IC ₅₀ | 72 hours | - | | _ | - | - |
| Other organi | sms | - | - | - | | _ | - | - |
| Chronic (long toxicity | g-term) | Doza | Exposu time | re Sp | oecies | Method | Evaluation | Note |
| Fish | | LC ₅₀ | 96 hours | - | | - | - | - |
| Crustacea: | | EC ₅₀ | 48 hours | - | | _ | - | - |
| Algae/aquati | c plants: | IC ₅₀ | 72 hours | - | | - | - | - |
| Other organi | sms | - | - | - | | - | - | - |
| 12.2. Per | rictorico o | nd degrad | ahility | | | | | |
| | iotic degra | | ability | | | | | |
| | - | adation ha | lf-lives | Me | ethod | | Evaluation | Note |
| Marine water | | No information available | | No informa | o information available | | ormation ole | - |
| Fresh water | No information available | | No information available | | No inf availal | ormation ole | - | |
| Air | No information available | | No informa | No information available | | ormation ole | - | |
| Soil | No infor | mation ava | ailable | No informa | tion available | No inf availal | ormation ole | - |

| Biodegrad | dation | | | |
|---------------|-------------|--------|------------|------|
| % Degradation | Time (days) | Method | Evaluation | Note |



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| Trade nam | ne: | POTASSIUM HYDROXIDE, SOLUTION | | | | | | | | | | | |
|--------------------------------|------------------------------|-------------------------------|--------|------------------------|---------------------|--------------------------|-----------------|---------|----------------------------|----------------------|----------------|----------|---|
| Product co | ode: | KHO-O | T-X* | k | Date | of compil | ation: | 14 | 4 Novembe | r 2022 | 2 | Version: | 5 |
| No informa available | | No inform available | natior | 1 | | informatio ilable | on | _ | information lable | | - | | |
| 12.3. B | ioaccum | ulative po | tenti | al | | | | | | | | | |
| 0 | ctanol-w | ater part | ition | coeffic | ient (log | g Kow) | | | 1 | | | | |
| Value | | centratio | | рН | °C | | ethod | | Evaluat | | | Note | |
| No information available | | iformation able | า - | _ | - | No info | | on | No informa available | tion | - | | |
| | | | | | | | | | | | | | |
| В | Bioconcer | ntration F | actor | (BCF) | | | | | | | | | |
| Value | | Sp | ecies | 5 | Method | | Evaluation | | Note | | | | |
| No informa available | | No inform available | natior | 1 | | informatio ilable | on | | o informatioi vailable | n | - | | |
| | | | | | | | | | | | | | |
| C | Chronic e | cotoxicity | , | | | | | | | | | | |
| Va | alue | Do | ose | | oosure :ime | Spe | cies | | Method | Eva | aluation | Not | е |
| Chronic tox | kicity on | fish LC₅ | 0 | No infori availa | mation able | No informa availab | | | o formation vailable | No infor avail | mation able | - | |
| Chronic tox crustacea (I | - | EC ₅ | 0 | No | mation | No informa availab | ation | N in | | | mation | - | |
| 12.4 | A = l= 1114 1. | :1 | | | | | | | | | | | |
| | obility in nown or | | dist | ributio | n in env | ironmenta | l comr | artm | nents: | | | | |
| | | p | . 4.50 | | CIIV | 5 | | | | | | | |
| Si | urface te | nsion: | | | | | | | | | | | |
| | Value | | °C | | Conce | ntration | | N | 1ethod | | | Note | |
| ir | lo nformatic available | | | | No info availabl | rmation e | No ir availa | | nation | _ | | | |



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| Product code: KHO-OT-X** Date of compilation: 14 November 2022 Version: 5 Adsorption / desorption | Trade nan | ne: | | POTASS | SIUM HYD | ROXIDE, SOLUTION | Page 13 of 17 |
|--|---------------|--|--------------------|---------------------|-------------|------------------|---------------|
| Transport A/D coefficient Henry's constant log Kow rate No information available information information information available information information information available information information available information information available information information available information available information information available information information available information available information information available information availab | Product code: | | KHO-OT-X** | | | | Version: 5 |
| Transport A/D coefficient Henry's constant log Kow rate No information available information information information available information information information available information information available information information available information information available information available information information available information information available information available information information available information availab | | | | | | | |
| Transport Henry's constant log Kow rate Method Note No information available No information available available information available available available No information N | A | Adsorption | on / desorption | | | | |
| Soil-water available available information available available information available available available information available infor | Transport | | | log Kow | | ion Method | Note |
| Water-air available available information available No information available 12.5. Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6. Endocrine disrupting properties 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. 12.7. Other adverse effects No information available SECTION 13. Disposal considerations 13.1. Waste treatment methods 13.1.1. Product/Packaging disposal: Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | Soil-water | | | | informatio | | - |
| Soil-air available available information available ———————————————————————————————————— | Water-air | | | | informatio | | - |
| This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6. Endocrine disrupting properties 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. 12.7. Other adverse effects No information available SECTION 13. Disposal considerations 13.1. Waste treatment methods 13.1.1. Product/Packaging disposal: Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | Soil-air | | | | informatio | | - |
| SECTION 13. Disposal considerations 13.1. Waste treatment methods 13.1.1. Product/Packaging disposal: Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | а | ccording | g to REACH Article | e 57(f) or Commissi | ion Delegat | | |
| SECTION 13. Disposal considerations 13.1. Waste treatment methods 13.1.1. Product/Packaging disposal: Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | 12.7. C | Other adv | verse effects | | | | |
| 13.1. Waste treatment methods 13.1.1. Product/Packaging disposal: Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | N | lo inforn | nation available | | | | |
| Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | | | | ons | | | |
| Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. 13.1.2. Waste codes/waste designations according to Law: Disposal must be made according to official regulations. | 12 1 1 | Droduct | ·/Dackaging dispo | calt | | | |
| Disposal must be made according to official regulations. | 13.1.1. | Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature | | | | | |
| Disposal must be made according to official regulations. | 13.1.2. | Waste o | codes/waste desig | nations according | to Law: | | |
| 13.1.3. Waste treatment – relevant information: | | | | | | S. | |
| | 13.1.3. | Waste t | reatment – releva | nt information: | | | |



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| Trade name: | | POTASSIUM HYD | YDROXIDE, SOLUTION | | | |
|---------------|------------|----------------------|--------------------|----------|---|--|
| Product code: | KHO-OT-X** | Date of compilation: | 14 November 2022 | Version: | 5 | |

| | No information available | | | | | |
|-----------------------------|---|--|--|--|--|--|
| | | | | | | |
| 13.1.4. | Sewage disposal – relevant information: | | | | | |
| | Waste must not be disposed | of into the sewage system. | | | | |
| | | | | | | |
| 13.1.5. | Other disposal recommendat | tions: | | | | |
| | authorized by the ministry in | ct's remains into the sewage system. Submit the remains to the collectors charge. Do not dispose of the packaging into the sewage system. Submit ors authorized by the ministry in charge. | | | | |
| 13.1.6. | Relevant Community provision | ons: | | | | |
| | - | | | | | |
| | | | | | | |
| SECTION | 14. Transport information | | | | | |
| | Transporting/shipment by roa | d (ADR) | | | | |
| UN numbe | er: | Not subject to transport regulations | | | | |
| UN prope | r shipping name: | - | | | | |
| Transport | hazard class(es): | - | | | | |
| Packing gı | roup: | - | | | | |
| Environme | ental hazards: | - | | | | |
| Special pro | ecautions for user: | - | | | | |
| | Transporting/shipment by rail | (RID) | | | | |
| UN numbe | er: | Not subject to transport regulations | | | | |
| UN prope | r shipping name: | - | | | | |
| Transport | hazard class(es): | - | | | | |
| Packing gı | roup: | - | | | | |
| Environme | ental hazards: | - | | | | |
| Special pro | ecautions for user: | - | | | | |
| | Transporting/shipment by inla | nd waterways (ADN) | | | | |
| UN number: | | Not subject to transport regulations | | | | |
| UN proper shipping name: | | - | | | | |
| Transport hazard class(es): | | - | | | | |
| Packing group: | | - | | | | |
| Environmental hazards: | | - | | | | |
| Special pro | ecautions for user: | - | | | | |
| | Transporting/shipment by sea | (IMDG) | | | | |
| UN numbe | er: | Not subject to transport regulations | | | | |



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| Trade name: | POTASSIUM HYDROXIDE, SOLUTION | | | | | | | | |
|---|-------------------------------|----------------------|------------------|----------|---|--|--|--|--|
| Product code: | KHO-OT-X** | Date of compilation: | 14 November 2022 | Version: | 5 | | | | |
| | | 7 | | | | | | | |
| UN proper shippi | ng name: | - | | | | | | | |
| Transport hazard | class(es): | - | | | | | | | |
| Packing group: | | - | | | | | | | |
| Environmental hazards: | | - | | | | | | | |
| Special precautions for user: | | - | | | | | | | |
| Transport in bulk according to Annex II | | - | | | | | | | |

| Transporting/shipment b | oy air (ICAO-TI/IATA-DGR) |
|-------------------------------|--------------------------------------|
| UN number: | Not subject to transport regulations |
| UN proper shipping name: | - |
| Transport hazard class(es): | - |
| Packing group: | - |
| Environmental hazards: | - |
| Special precautions for user: | - |
| | · |

| SECTIO | TION 15. Regulatory information | | | | |
|--------|---------------------------------|---|--|--|--|
| 15.1. | Safety, health and enviro | Safety, health and environmental regulations/legislation specific for the substance or mixture | | | |
| | EU regulations | | | | |
| | Authorisation and/or res | trictions on 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: | POTASSIUM HYDROXIDE, SOLUTION | | | | |
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| | Information according guideline) | 1999/13/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 assessr | nent |
| | - | |

| 16.1. | Indic | ation 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. | | |
| 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. | Relev | ant H statements (nu | mber and full text) | | |
| | H: | H90 H02 314 315 319 | May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye irritation. | | |
| 16.6. | Train | ing advice: | - | | |
| 16.7. | Further information: | | "X" in the product code marks different volumes (different packaging of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet. | | |



SAFETY DATA SHEET

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

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| Trade name: | | POTASSIUM HYD | PROXIDE, SOLUTION | | |
|---------------|------------|----------------------|-------------------|----------|---|
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| ANNEX: Exposure scenario resulting to Chemical safety assessment | |
|--|--|
| - | |