

SAFETY DATA SHEET

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

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| Trading name: | | GRAM SAFRANIN 52 | CONCENTRATED | | |
|---------------|--------------|------------------|--------------|----------|---|
| Product code: | SO05X-OT-X** | Revision date: | 23 Dec 2022 | Version: | 5 |

| 1.1 | Product identifier | | | |
|-----|-------------------------|----------------|---------------------|---|
| | Trading name: | GRAM SAF | RANIN 5x | CONCENTRATED |
| | Chemical name: | - | | |
| | Catalogue number: | SO05X-OT- | X** | |
| 1.2 | Relevant identified us | es of the subs | tance or n | nixture and uses advised against |
| | Uses: | | Safranin to Gram | e O stock solution for preparing contrast staining solution acc. |
| | Uses advised against: | | Only the | e identified uses are advised. |
| | Reason why uses advi | sed against: | device, ı | duct is intended for use only as an <i>in vitro</i> diagnostic medical registered at the Agency for Medicinal Products and Medical and there is no reason to use it for other purposes. |
| 1.3 | Details of the supplier | of the safety | data shee | t |
| | Supplier: | | BioGnos | st Ltd. |
| | Address: | | Medjug | orska 59, Zagreb |
| | Telephone number: | | +385 1 2 | 2409997 |
| | Telefax.: | | +385 1 2 | 2404039 |
| | e-mail of competent p | person: | msds@b | piognost.hr |
| | National contact: | | - | |
| 1.4 | Emergency telephone | number | | |
| | National Protection a | 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 Regu | ulation (EC) No 12 | 72/2008 (CLP) |
| | Hazard class and catego | ory code: | Hazard statements*: |
| | Flam. Liq. 3 | | H226 |
| 2.1.2. | Additional information | | |
| | - | | |
| *For ful | ll text of Hazard- and EU Hazard- | statements: see S | ECTION 16 |
| 2.2 | Label elements | | |
| | Product identification: | GRAM SAFRANI | N 5x CONCENTRATED |
| | Identification number: | - | |
| | Authorization number: | - | |



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| | Hazard pictograms: | GHS02 |
|-----|--|---|
| | Signal word: | Danger |
| | Hazard statements: | H226 Flammable liquid and vapor. |
| | Precautionary statements: | P210 Keep away from heat, hot sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection. |
| | Supplemetal hazard information (EU): | - |
| 2.3 | Other hazards | |
| | The product has no other know | n specific hazards for human or environment. |
| | Results of PBT and vPvB assess PBT or vPvB substances. | ment: Based on available data, the product does not contain any |
| | Endocrine disrupting property: | Based on available data, does not contain endocrine disruptors. |

| SECTION 3. Co | mposition/information | on ingredients | | |
|--|---------------------------|--------------------------------|---------------------|--|
| CAS/ EC/ Index number | REACH Registration No | Weight % content (or range) | Identification name | Classification according to Regulation (EC) No 1272/2008 (CLP) |
| 64-17-5/ 200-578-6/ 603-002-00-5 | 01-2119457610-43- 0147 | 10 – 20 % | ethanol | Flam. Liq. 2; H225 |

| SECT | ION 4. First aid measures | |
|------|--------------------------------|--|
| 4.1 | Description of first aid measu | res |
| | General notes: | If the suggested first aid measures do not prove sufficient, seek medical attention. |
| | Following inhalation: | Take the victim into fresh air, loosen his clothes and place him in a comfortable position. If breathing difficulty occurs, administer artificial respiration. In case of complaints call a physician. |
| | Following skin contact: | Remove the contaminated clothes. Wash the skin surface under plenty of running water. Seek medical assistance if the symptoms of irritation remain. |



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| | Following eye contact: | In case of contact with eyes flush with water holding eyelids apart and moving the eyeballs (for at least 10 minutes). If the symptoms remain, immediately call in ophthalmologist. |
|-----|-------------------------------------|---|
| | Following ingestion: | Place the victim in a comfortable position. Rinse the mouth with clean water. If the victim is conscious induce vomiting. Do not give the victim anything orally, and do not induce vomiting if the victim is unconscious or suffers from convulsions. |
| | Self-protection of the first aider: | - |
| 4.2 | Most important symptoms and ef | fects, both acute and delayed |
| | Following inhalation: | Inhalation of larger quantities may affect the central nervous system. |
| | Following skin contact: | Prolonged or repeated dermal contact may cause the defatting and dryness of the skin. |
| | Following eye contact: | May irritate the eyes. |
| | Following ingestion: | Ingestion of larger quantities may affect the central nervous system. |
| 4.3 | - | cal attention and special treatment needed ne body, obtain medical treatment (gastric lavage, activated carbon). |

| SECTI | ON 5. Firefighting measures | |
|-------|---|--|
| 5.1 | Extinguishing media | |
| | Suitable extinguishing media: | Extinguishing powder, alcohol-resistant foam, water, carbon-dioxide. |
| | Unsuitable extinguishing media: | Water with full jet. |
| 5.2 | Special hazards arising from the su | ubstance or mixture |
| | Hazardous combustion products: | Highly flammable liquid and vapour. In case of fire, smoke, and other combustion products (carbon monoxide, carbon dioxide) may be formed, the inhalation of such combustion products can have serious adverse effects on health. Vapours may form an explosive mix with air. Vapours may be ignited by open flames, sparks, electrical equipment, or static charge. Vapours may travel to great distances, ignite in contact with ignition sources and flash back to the primer source (container). Vapours of ethyl alcohol mix greatly with air and may form an explosive mixture. Air containing 3.3 – 19 % ethyl alcohol vapours may explode in contact with ignition sources. Diluting the mixture with large amounts of water results in the loss of its flammability (around 10 % concentration of ethyl alcohol). |
| 5.3 | Advice for firefighters | |
| | Wear full protective clothing and s water spray. Use water spray to dis | elf-contained breathing apparatus. Cool the fire affected containers with ssipate alcohol vapours. |
| 5.4 | Additional information | |
| | - | |



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| | ON 6. Accidental release meas | |
|---------------|---|--|
| 6.1 | Personal precautions, protective | ve equipment and emergency procedures |
| 6.1.1. | For non-emergency personnel | |
| | Protective equipment: | Use personal protective equipment (see Section 8). |
| | Accident prevention methods: | Evacuate members of all non-essential personnel and those members without protective equipment. |
| | Emergency procedures: | Mark the area using proper signs. |
| 6.1.2. | For emergency responders: | |
| | ventilation. Vapours may accu | and clothing and inhaling gases, vapours and aerosols. Ensure adequate mulate at floor level in low and confined spaces. Remove all heat, ignition chines. Ignition spark arrestor must not be operated in the danger area. Use the risk of slipping. |
| 6.2 | Environmental precautions: | |
| | | resulting waste according to the applicable environmental regulations. Do |
| | • | e resulting waste to enter sewers/soil/surface or ground water. Notify the dance with local law in the case of environmental pollution immediately. |
| 6.3 | • | dance with local law in the case of environmental pollution immediately. |
| 6.3 6.3.1. | respective authorities in accord | dance with local law in the case of environmental pollution immediately. |
| | respective authorities in accord Methods and material for cont Bunding, covering of drains; | dance with local law in the case of environmental pollution immediately. |
| 6.3.1. | methods and material for cont Bunding, covering of drains; capping procedures: | dance with local law in the case of environmental pollution immediately. cainment and cleaning up Sand protective barrier or barriers made of similar materials. Collect the spilled product with inert, non-combustible absorbent (e.g. sand, vermiculite, earth) then place into a suitable, closed, properly labelled chemical waste container for removal/disposal. During the collection, placement, disposal of the waste, wear appropriate individual protective equipment. Flush the remains with plenty of water. The product loses its flammability, if |
| 6.3.1. | methods and material for cont Bunding, covering of drains; capping procedures: Cleaning up: | cainment and cleaning up Sand protective barrier or barriers made of similar materials. Collect the spilled product with inert, non-combustible absorbent (e.g. sand, vermiculite, earth) then place into a suitable, closed, properly labelled chemical waste container for removal/disposal. During the collection, placement, disposal of the waste, wear appropriate individual protective equipment. Flush the remains with plenty of water. The product loses its flammability, if diluted with significant amount of water (approx. 10% solution). Secure proper ventilation. Do not use incompatible materials (see Section |

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



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| | Measures to prevent fire: | | Use in well ventilated storage rooms. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparkling tools and equipment. | |
|--------|--|--------------------|--|--|
| | Measures to prevent aerosol and dust generation | ո: | Ensure adequate ventilation. | |
| | Measures to protect the environment: | | Prevent spilling into the sewage system and waterways. | |
| | Other measures: | | Protect against electrostatic charges. | |
| 7.1.2. | Advice on general occupational hygiene: | | | |
| | Do not eat, drink or smoke in the workspace. The | oroughly was | sh hands after work and before eating. | |
| 7.2 | Conditions for safe storage, including any incompatibilities | | | |
| | Technical measures and storage conditions: | away from unopened | well-ventilated place, protected from sunlight, a sources of heat and ignition, in its original, and hermetically sealed packaging, away lizing agents, food, feed and articles of on. | |
| | Packaging materials: | Manufactu | curer's original packaging. | |
| | Requirements for storage rooms and vessels: | Keep away | r from food and drink. Keep the containers sed. | |
| | Advices for storage equipment: | be resistar | e must be made of hard material; floors must nt to chemicals. There must be no drain that eads into sewage system. Secure proper | |
| | Further information on storage conditions: | and do n | ace the unused material in the storage room ot use empty containers for storing other Do not store with incompatible materials (see). | |
| 7.3 | Specific end use(s) | | | |
| | Recommendations: | - | | |
| | Industrial sector specific solutions: | - | | |

| SECTION 8. Exposure controls/personal protection | | | | | |
|--|--------------------|--------|-------------------------------|-------------------------|--|
| 8.1 Control parameters | Control parameters | | | | |
| Substance | CAS No | | exposure limit term values | Biological limit values | |
| | | ppm | mg/m³ | _ | |
| Ethanol | 64-17-5 | 1000/- | 1900/- | - | |
| | | • | | | |
| Substance name: - | | | | | |



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| Troduct code. | 3003X-01-X | TREVISIO | on date. | 23 Dec 2022 | version. |
|---------------------|--|-------------------|------------------------------------|--|---|
| TC No. | CACAL | | | | |
| EC No: | - CAS No |): - | | | |
| DNEL | | l _{se} . | dustrial | | |
| | Anuta | | dustriai | Charania | Charania |
| Route of exposure: | Acute effect local | Acute | | Chronic effect local | Chronic offset systemic |
| Oral | effect local | effect systemi | _ | effect local | effect systemic |
| Orai | 1900 mg/m ³ | - | - | | - |
| Inhalation | (ethanol) | - | - | | 380 mg/m³ (ethanol) |
| Dermal | - | - | - | | 343 mg/kg (ethanol) |
| Critical physical p | parameters: solubility, | flammability, co | rrosivity: | - | |
| Consumer | | | | | |
| Route of | Acute | Acute | | Chronic | Chronic |
| exposure: | effect local | effect systemi | c | effect local | effect systemic |
| Oral | | - | - | | 87 mg/kg bw/day (ethanol) |
| Inhalation | 950 mg/m ³ (ethanol) | - | - | | 114 mg/m³ (ethanol) |
| Dermal | - | - | - | | 206 mg/kg (ethanol) |
| PNEC | | | | | |
| Environmental p | otection target | | PNEC | | |
| Fresh water | | | 0.96 mg/l (ethanol) | | |
| Freshwater sedin | nents | | 3.6 mg/kg (ethanol) | | |
| Marine water | | | 0.79 mg/l (ethanol) | | |
| Marine sediment | S | | 2.9 mg/kg | g (ethanol) | |
| Food chain | | | 380-720 mg/kg (ethanol) | | |
| Microorganisms | in sewage treatment | | 580 mg/l (ethanol) | | |
| Soil (agricultural) | | | 0.63 mg/kg (ethanol) | | |
| Air | | | no information available | | |
| | | | • | | |
| 8.2 Exp | osure controls | | | | |
| • | ropriate engineering | controls | | | |
| Sub | Substance/mixture related measures to prevent exposure during identified uses: | | concentra concentra existing | ation limit it is the ation levels down t scientific and techn | naterial with no controlled e employer's duty to keep to a minimum achievable by nological means, where the no harm to workers. |
| | ctural measures to prosure: | event | In accord | ance with Section 7 | |



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| | Organisational measures to preve exposure: | nt | Organization of work in order to reduce other worker's influence during work process. | |
|----------|---|--|---|--|
| | Technical measures to prevent exposure: | | In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Use according to general application methods and with adequate ventilation. | |
| | , , , , , , , , , , , , , , , , , , , | | Use non-sparkling ventilation system. | |
| | | | Provide appropriate personal protective equipment, safety shower and eye-wash station. | |
| 8.2.2. | Personal protection equipment | | | |
| 8.2.2.1. | Eye and face protection: | | propriate, chemical-proof protective glasses/face shield (EN 321-1:2022, EN 166). | |
| 8.2.2.2. | Skin protection | | | |
| | Hand protection: | Use appropriate, chemical-resistant protective gloves (E | | |
| | Other skin protection: | Use ap | propriate protective clothing. | |
| 8.2.2.3. | Respiratory protection: | concer in the contac | e of normal usage and ventilation, it is not necessary. If ntration of ethyl alcohol exceeds occupational exposure limits air, use a self-contained breathing apparatus. For short at and if the oxygen content of the air is greater than 18 %, use ective gas mask with filter A (EN 14837/A1). | |
| 8.2.2.4. | Thermal hazards: | No the | ermal hazards known. | |
| 8.2.3. | Environmental exposure controls | | | |
| | Substance/mixture related measures to prevent exposure: | See Se | ection 6 | |
| | Structural measures to prevent exposure: | Use mo | odern equipment. | |
| | Organisational measures to prevent exposure: | Adapt workpl | the work process to the required working conditions of the lace. | |
| | Technical measures to prevent exposure: | See Section 6 | | |

| SECTI | SECTION 9. Physical and chemical properties | | | |
|-------|---|---------------------------------------|--------------------------|--|
| 9.1 | Information on basic physical and chemical properties | | | |
| | | Value | Method | |
| | Physical state: | liquid | No information available | |
| | Colour: | red | No information available | |
| | Odour/odour threshold: | ethanol like/no information available | No information available | |
| | Melting point / freezing point: | No information available | No information available | |



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| | - | | |
|-----|---|--------------------------|--------------------------|
| 9.2 | Other information | | |
| | Particle characteristics: | No information available | No information available |
| | Relative vapour density: | No information available | No information available |
| | Density and/or relative density: | No information available | No information available |
| | Vapour pressure: | No information available | No information available |
| | Partition coefficient n-octanol/water (log value): | No information available | No information available |
| | Solubility: | No information available | No information available |
| | Kinematic viscosity: | No information available | No information available |
| | pH: | No information available | No information available |
| | Decomposition temperature: | No information available | No information available |
| | Auto-ignition temperature: | No information available | No information available |
| | Flash point: | 49 °C | No information available |
| | Lower and upper explosion limit: | No information available | No information available |
| | Flammability: | No information available | No information available |
| | Boiling point or initial boiling point and boiling range: | No information available | No information available |

| SECTION | SECTION 10. Stability and reactivity | | |
|---------|--------------------------------------|--|--|
| 10.1 | Reactivity: | See Section 10.5. | |
| 10.2 | Chemical stability: | Stable within normal temperature and general work conditions. | |
| 10.3 | Possibility of hazardous reactions: | See Section 10.5. | |
| 10.4 | Conditions to avoid: | Keep away from heat, sparks, open flames, strong heating and ignition sources. No smoking. | |
| 10.5 | Incompatible materials: | Strong oxidizing agents (inorganic strong acid, nitric acid, perchlorates, peroxy compounds, perchloric acid, permanganates etc.), alkali metals, alkali earth metals. | |
| 10.6 | Hazardous decomposition products: | Carbon monoxide and carbon dioxide. | |

| SECTIO | SECTION 11. Toxicological information | | | | | | | | | | |
|---------|---------------------------------------|--|------------------|---------------------------------------|---------------|--------------|--|--|--|--|--|
| 11.1 | Informatio | Information on hazard classes as defined in Regulation (EC) No 1272/2008 | | | | | | | | | |
| | Acute toxic | Acute toxicity: | | | | | | | | | |
| Route o | | Method | Species | Dose LD_{50}/LC_{50} or ATE_{mix} | Exposure time | Results | | | | | |
| Oral: | | - | rat (ethanol) | LD ₅₀ | _ | 7.060 mg/kg | | | | | |
| Dermal: | | - | rabbit (ethanol) | LD ₅₀ | - | >20.000 mg/l | | | | | |



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| Inhalation: | | - | rat (ethanol) | | LC ₅₀ | | 4 h | | >8.000 mg/l |
|---------------------------------|-----------|----------------------------|--|---------------------------|--------------------------|--------------------------------|-------------|------------------|---------------|
| | | | | | | | | | |
| Specific | targe | t organ toxicit | y – single exp | osure (STC | OT SE): | | | | |
| | | Spec | ific effects | | | Target orga | n | | Note |
| Oral: | N | o information | available | 1 | No information available | | | - | |
| Dermal: | N | o information | available | | | rmation avail | | - | |
| Inhalation: | N | o information | available | ٢ | No info | rmation avail | able | - | |
| Aspirat | ion haz | zard: | ٨ | lo informa | ation a | vailable. | | | |
| Irritatio | n and | corrosion | | | | | | | |
| | Exposure | | | Species | 5 | Evaluation | Method | | Note |
| Skin corrosion/irritati | ion: | - | - | | | - | - | - | |
| Serious eye damage/irritatio | n | - | - | | | - | - | - | |
| Sensitiz | zation | | | | | | | | |
| Skin sensitizatio | n: | No inf | ormation avai | lable. | | | | | |
| Respiratory sens | sitizatio | on: No inf | ormation avai | lable. | | | | | |
| Sympto | oms rel | ated to the ph | nysical, chemic | cal and to | kicolog | ical character | istics | | |
| Oral exposure: | | | of great c ness and alcoh y occur. Repea | nol poison | ing. In | case of swallc | wing great | • | nausea and |
| Dermal exposure | e: | After prolon cracking of s | • | ited expo | sure s | ymptoms ma | ay include: | defatting, | dryness and |
| Inhalation expos | sure: | Inhalation of membranes. | great quantiti | es may ca | use diz | ziness, eupho | ria and mil | d irritation | of the mucous |
| Eye exposure: | | May cause ir | ritation and re | dness. | | | | | |
| Repeat | ed dos | e toxicity (sub | acute, subchro | onic, chro | nic) | | | | |
| | | Dose Dose | Exposure time | Species | | Method | Evalua | ation | Note |
| Subacute oral | | information lable | No information available | No informa availabl | | No information available | No in | formation ble | - |



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| Subacute dermal | No availa | information able | No information available | No information available | No information available | No inform available | nation | - |
|---|------------------|--|--|--------------------------------|---|--|--------|----------|
| Subacute inhalation | No availa | information able | No information available | No information available | No information available | No inform | nation | – |
| Subchronic oral | No availa | information able | No information available | No information available | No information available | No inform | nation | _ |
| Subchronic dermal | No availa | information able | No information available | No information available | No information available | No inform available | nation | - |
| Subchronic inhalation | No availa | information able | No information available | No information available | No information available | No inform available | nation | - |
| Chronic oral | No availa | information able | No information available | No information available | No information available | No information available | | - |
| Chronic dermal | No availa | information able | No information available | No information available | No information available | No inform available | nation | - |
| Chronic inhalation | No availa | information able | No information available | No information available | No information available | No inforn available | nation | - |
| | | | | | | | | |
| Specific | target | organ toxicit | v – reneated e | xnosure (STOT | RE)· | , | | |
| Specific | target | organ toxicit | <u> </u> | xposure (STOT | | rgan | | Note |
| : • | target | | y – repeated e Specific effec tion available | • | RE): Target o | | - | Note |
| Subacute oral | | No informa | Specific effec | • | Target o | n available | _ | Note |
| Subacute oral Subacute derma | l | No informa | Specific effection available | • | Target o | n available n available | | Note |
| Specific Subacute oral Subacute derma Subacute inhalat Subchronic oral | l | No informa No informa No informa | Specific effection available | • | Target o No information | n available n available n available | | Note |
| Subacute oral Subacute derma Subacute inhala | l tion | No informa No informa No informa No informa | Specific effection available tion available tion available | • | No information No information No information | n available n available n available n available | - | Note |
| Subacute oral Subacute derma Subacute inhalat Subchronic oral Subchronic dern | l tion nal | No informa No informa No informa No informa No informa | Specific effection available tion available tion available tion available | • | Target of No information No information No information No information | n available n available n available n available n available | - | Note |
| Subacute oral Subacute derma Subacute inhalat Subchronic oral Subchronic dern Subchronic inha | l tion nal | No informa No informa No informa No informa No informa No informa | Specific effection available tion available tion available tion available tion available | • | No information No information No information No information No information | n available n available n available n available n available n available | - | Note |
| Subacute oral Subacute derma Subacute inhalat Subchronic oral | l tion nal | No informa | Specific effection available tion available tion available tion available tion available tion available tion available | • | No information No information No information No information No information No information | n available n available n available n available n available n available | - | Note |



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| | Mutagenicity in vitro: | Based on available data, the classification criteria are not met. | | | | | | |
|---------|---|---|---|--|--|--|--|--|
| | Genotoxicity: | Based on available data, the classification criteria are not met. | | | | | | |
| | Mutagenicity in vivo: | Ba | sed on available data, the classification criteria are not met. | | | | | |
| | Germ cell mutagenicity: | Ba | sed on available data, the classification criteria are not met. | | | | | |
| | Reproductive toxicity: | Ba | sed on available data, the classification criteria are not met. | | | | | |
| | | | | | | | | |
| | Summary of evaluation of the CN properties: | ЛR | Based on available data, the classification criteria are not met. | | | | | |
| | | | | | | | | |
| 11.2 | Information on other hazards: | | | | | | | |
| 11.2.1. | Endocrine disrupting properties: | | | | | | | |
| | Based on available data, does not contain endocrine disruptors. | | | | | | | |
| 11.2.2. | Other informations: | | | | | | | |
| | - | | | | | | | |

| SECTION 12. Ecologic | cal informat | ion | | | | |
|------------------------------|------------------|------------------|--------------------------|--------------------------------|-------------------------------|------|
| 12.1 Toxicity | | | | | | |
| Acute (short-term) toxicity | Dose | Exposure time | Species | Method | Evaluation | Note |
| Fish | LC ₅₀ | 96 hours | golden orf | No information available | 8.140 mg/l /48 h (ethanol) | - |
| Crustacea: | EC ₅₀ | 48 hours | daphnia magna | No information available | 7.800 mg/l (ethanol) | - |
| Algae/aquatic plants | IC ₅₀ | 4 days | algae | No information available | 5.000 mg/l / 7d (ethanol) | - |
| Other organisms | - | - | - | _ | _ | - |
| Chronic (long-term) toxicity | Dose | Exposure time | Species | Method | Evaluation | Note |
| Fish | LC ₅₀ | 96 hours | No information available | No information available | No information available | - |
| Crustacea: | EC ₅₀ | 48 hours | No information available | No information available | No information available | - |



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| | | | | | | | | rage | 12 01 1 | <i>I</i> |
|--------------------------|--------------------------|--------------------|--------------|------------------------|--------------------------|--------------------------------|----------|--------------------------|---------|----------|
| Trading name | e: | | | GR | AM SAFRANIN | I 5x CONCEN | TRATED | | | |
| Product code | : | SO05X-OT-X | (** | R | Revision date: | 23 Dec 20 |)22 | Vers | on: | 5 |
| Algae/aquatic | plants | IC ₅₀ | 72 hours | • | No information available | No information available | No infor | | - | |
| Other organism | ns | - | - | | - | - | - | | - | |
| - | | | | | | | | | | |
| 12.2 Persis | tence | and degradab | oility | | | | | | | |
| Abioti | ic degr | radation | | | | : | | | | |
| | D | egradation ha | alf-lives | | Method | Evaluatio | on | N | lote | |
| Marine water | No | information a | vailable | | information ailable | No information available | on - | | | |
| Fresh water | No information available | | | information ailable | No informatio | i _ | | | | |
| Air | No | information a | vailable | | information ailable | No informatio | | - | | |
| Soil | No | information a | vailable | | information ailable | No informatio | on - | | | |
| | • | | | | | | • | | | |
| Biode | gradat | tion | | | | | | | | |
| % Degradati | on | Time (c | days) | | Method | Evaluatio | on | ١ | lote | |
| No information available | 1 | No in available | formation | | information ailable | No information available | | No information available | | |
| | | | | | | | | | | |
| | | <u> </u> | | | | | | | | |
| 12.3 Bioaco | cumula | ative potentia | l | | | | | | | |
| Octan | ol-wat | ter partition c | oefficient (| log k | (ow) | | | | | |
| Value | Coı | ncentration | рН | °C | Method | Evalu | uation | | Note | |
| - | - | | - | - | - | - | | - | | |
| | | | | | | | | | | |
| D:- | | | 205) | | | | | | | |
| | ncentr | ration factor (E | | | Method | Г1 4 | ion | , | Note | |
| Value | | Specie No inf | ormation | Nο | information | Evaluation No information | | | Note | |
| | | | CITTALIOIT | INU | ormation | i vo ii ii oi ii iat | .011 | | | |

available

available

available



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| Trading name: | | GRAM SAFRANIN 5x CONCENTRATED | | | | | | | | |
|---------------|--------------|-------------------------------|-------------|----------|---|--|--|--|--|--|
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| | Chronic | ecoto | xicity | | | | | | | |
|----------|--------------------------------------|---------------------------------------|------------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------------|------|--|
| | Value | | Dose | Exposure time | Species | Meth | nod | Evaluation | Note | |
| Chroni | c toxicity | on fish | LC ₅₀ | information | No information available | No informavailab | | No information available | - | |
| | Chronic toxicity on EC ₅₀ | | | information | No information available | No informa availab | | No information available | - | |
| 12.4 | Mobilit | v in soi | l | | | | | | | |
| | | - | | on in environme | ntal compar | tments: | | | | |
| | | - | n available | | | | | | | |
| | Surface | | | | | | | | | |
| | Value °C | | | Concentrati | on | n Method | | | Note | |
| | | No No information available available | | No informati | | No information available | | - | | |
| | Adsorp | tion / c | desorption | | | | | | | |
| Transp | | A/[| coefficient ry's constant | log Kow | Evaporat | Evaporation rate | | /lethod | Note | |
| Soil-wa | ater | No availa | information able | No information available | No informavailable | mation | No information available | | - | |
| Water- | air | No availa | information able | No information available | n No informavailable | | No in availa | formation ble | - | |
| Soil-air | , | No availa | information able | No information available | No informavailable | | No in availa | formation ble | - | |
| 12.5 | Results | of PBT | and vPvB asses | sment | | | | | | |
| | Based o | on avai | able data, the p | roduct does not | contain any | PBT or v | PvB suk | ostances. | | |
| 12.6. | Endoc | ina dia | rupting properti | 05 | | | | | | |
| 17.0. | LIIUUUI | irie disi | uptilia biobeiti | CO | | | | | | |



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| 12.7. | Other adverse effects | | | | |
|-----------------------------|---|--|--|--|--|
| | Do not let the product or | its residues reach sewer system, waterways and soil. | | | |
| | | | | | |
| SECTIO | N 13. Disposal considerat | ions | | | |
| 13.1 | Waste treatment metho | ds | | | |
| | | | | | |
| 13.1.1. | Product/Packaging disp | osal: | | | |
| | Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. | | | | |
| 13.1.2. | Waste codes/waste desi | gnations according to Law: | | | |
| | Packaging that contains | residual hazardous substances or is contaminated with hazardous substances | | | |
| 13.1.3. | Waste treatment – relev | ant information: | | | |
| 7577157 | 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 recommendations: | | | | |
| | Do not dispose of the product's remains into the sewage system. Submit the remains to the collector authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Subm the packaging to the collectors authorized by the ministry in charge. Unused product residues may b burnt. | | | | |
| 13.1.6. | Relevant Community pro | ovisions: | | | |
| | Disposal must be made | according to official regulations. | | | |
| | | | | | |
| SECTIO | N 14 TRANSPORT INFOR | MATION | | | |
| | Transporting/shipment by | road (ADR) | | | |
| UN number: | | 1170 | | | |
| UN proper shipping name: | | Ethanol solution | | | |
| Transport hazard class(es): | | 3 | | | |
| Packing group: | | III | | | |
| Environmentally hazardous: | | - | | | |
| Special p | orecautions for user: | | | | |
| | Transporting/shipment by | | | | |
| UN number: | | 1170 | | | |



SAFETY DATA SHEET

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

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| UN proper shipping name: | | Ethanol solution | | |
|---|------------------------------------|---|--|--|
| Transport hazard class(es | s): | 3 | | |
| Packing group: | | III | | |
| Environmentally hazardo | us: | - | | |
| Special precautions for u | ser: | - | | |
| Inland waterway | / transport (ADN) | | | |
| UN number: | | 1170 | | |
| UN proper shipping nam | ie: | Ethanol solution | | |
| Transport hazard class(es | s): | 3 | | |
| Packing group: | | III | | |
| Environmentally hazardo | us: | - | | |
| Special precautions for u | ser: | - | | |
| Transporting/sh | ipment by sea (IN | ИDG) | | |
| UN number: | | 1170 | | |
| UN proper shipping nam | ie: | Ethanol solution | | |
| Transport hazard class(es | s): | 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/sh | ipment by air (IC | AO-TI/IATA-DGR) | | |
| UN number: | | 1170 | | |
| UN proper shipping nam | ie: | Ethanol solution | | |
| Transport hazard class(es): | | 3 | | |
| Packing group: | | III | | |
| Environmentally hazardo | us: | - | | |
| Special precautions for u | ser: | - | | |
| Further information: | volume is not s IATA: Special P | rovision 144 – An aqueous solution containing 24% or less alcohol by subject to classification. rovision A58 - An aqueous solution containing 24% or less alcohol by subject to classification. | | |

SECTION 15. Regulatory information

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



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| | EU regulations | | | |
|------|--|--|--|--|
| | Authorization and/or restrictions 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; COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). | | |
| | | dangerous substances, mixtures and articles (Annex XVII); | | |
| | Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-quideline) | | | |
| | National legislation: | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act | | |
| 15.2 | Chemical safety assessme | ent | | |
| | None | | | |

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



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| Trading name: | GRAM SAFRANIN 5x CONCENTRATED | | | | |
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| 16.2 | Abbreviations and acronyms | ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative | | |
|----------|---|--|--|--|
| 16.3. | Key literature references and source of data: | d - | | |
| 16.4. | Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP) | | | |
| Classifi | cation | Classification procedure | | |
| _ | | - | | |
| 16.5. | Relevant H statements (num | ber and full text) | | |
| | H: 225 | Highly flammable liquid and vapor. | | |
| | 226 | Flammable liquid and vapor. | | |
| 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. | | |

| 1 | ANNEX: Exposure scenario resulting to chemical safety assessment |
|---|--|
| - | - |