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| Trading name: | | HISTAN | OL 70 | | |
|---------------|---------|----------------|-------------|----------|---|
| Product code: | H70-X** | Revision date: | 05 Dec 2022 | Version: | 6 |

| 1.1 | Product identifier | | | | | |
|-----|--|-----------------------|--|---|--|--|
| | Trading name: | HISTANOL | HISTANOL 70 | | | |
| | Chemical name: | Ethyl alcoh | Ethyl alcohol | | | |
| | Catalogue number: | H70-X** | | | | |
| 1.2 | Relevant identified us | es of the subs | tance or n | nixture and uses advised against | | |
| | Uses: | | For use | in histocytology and cytology sample processing. | | |
| | Uses advised against: | Uses advised against: | | e identified uses are advised. Unsuitable for human aption. | | |
| | 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 shee | t | | |
| | Supplier: | Supplier: | | BioGnost Ltd. | | |
| | Address: | | Medjugorska 59, Zagreb | | | |
| | Telephone number: | | +385 1 2409997 | | | |
| | Telefax.: | | +385 1 2404039 | | | |
| | e-mail of competent p | person: | msds@biognost.hr | | | |
| | National contact: | | - | | | |
| 1.4 | Emergency telephone | number | | | | |
| | National Protection and Rescue Dire | | ectorate [.] | 112 | | |
| | National Protection a | | cetorate. | | | |
| | National Protection an Medical information: | | | +385 1 2348 342 | | |

| SECTIC | N 2. Hazards identification | | |
|---------|---------------------------------|----------------------|---------------------|
| 2.1 | Classification of the substand | e or mixture | |
| 2.1.1 | Classification according to R | egulation (EC) No 12 | 272/2008 (CLP) |
| | Hazard class and cate | egory code: | Hazard statements*: |
| | Flam. Liq. 2 | | H225 |
| 2.1.2. | Additional information | | |
| | - | | |
| *For fu | ll text of Hazard- and EU Hazar | d-statements: see S | ECTION 16 |
| 2.2 | Label elements | | |
| | Product identification: | HISTANOL 70 | |
| | Identification number: | - | |
| | Authorization number: | - | |



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| | Hazard pictograms: | GHS02 |
|-----|---|---|
| | Signal word: | Danger |
| | Hazard statements: | H225 Highly 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. P403+P235 Store in a well-ventilated place. Keep cool. |
| | 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 | SECTION 3. Composition/information on ingredients | | | | |
|--|---|--------------------------------|---------------------|--|--|
| CAS/ EC/ Index number | REACH Registration No | Weight % content (or range) | Identification name | Classification according to Regulation (EC) No 1272/2008 (CLP) | |
| 64-17-5/ 200-578-6/ 603-002-00-5 | 01-2119457610-43- 0147 | ~ 70% | ethanol | Flam. Liq. 2; H225 | |

| SECTI | SECTION 4. First aid measures | | |
|-------|----------------------------------|--|--|
| 4.1 | Description of first aid measure | S | |
| | 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 | ibstance 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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| 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. | | |
| | Emergency procedures: | Mark the area using proper signs. | | |
| 6.1.2. | For emergency responders: | | | |
| | Avoid contact with skin, eyes and clothing and inhaling gases, vapours and aerosols. Ensure adequate ventilation. Vapours may accumulate at floor level in low and confined spaces. Remove all heat, ignitio and spark sources, turn off machines. Ignition spark arrestor must not be operated in the danger area. I spark-proof tools. Be aware of the risk of slipping. | | | |
| 6.2 | Environmental precautions: | | | |
| | resulting waste according to the applicable environmental regulations. Do resulting waste to enter sewers/soil/surface or ground water. Notify the lance with local law in the case of environmental pollution immediately. | | | |
| 6.3 | Methods and material for cont | ainment and cleaning up | | |
| 6.3.1. | Bunding, covering of drains; capping procedures: | Sand protective barrier or barriers made of similar materials. | | |
| 6.3.2. | Cleaning up: | 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). | | |
| 6.3.3. | ()ther intermation: | Secure proper ventilation. Do not use incompatible materials (see Section 10). | | |
| 6.4 | Reference to other sections | Reference to other sections | | |
| | See Section 7 for information of | on safe handling. | | |
| | See Section 8 for information of | on personal protection equipment. | | |
| | See Section 13 for disposal information. | | | |

| SECTIC | 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 generatio | n: | 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 incom | patibilities | |
| | 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 ion. |
| | Packaging materials: | Manufactu | ırer's original packaging. |
| | Requirements for storage rooms and vessels: | Keep away tightly clos | 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 n. |
| | 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 | | | | | | | | |
| Substance | CAS No | | exposure limit t term values | Biological limit values | | | | |
| | | ppm | mg/m ³ | | | | | |
| Ethanol | 64-17-5 | 1000/- | 1900/- | - | | | | |
| | | | | | | | | |
| Substance name: - | | | | | | | | |



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| | | | | | | | | | |
| EC No: | | - | CAS No | : - | | | | | |
| DNEL | | | | | | | | | |
| | | | | In | dustrial | | | | |
| Route of | | Acu | | Acute | | Chronic | Chronic | | |
| exposure: | | effect | local | effect systemi | с | effect local | effect systemic | | |
| Oral | - | 1000 m.a | /m ³ | - | - | | - | | |
| Inhalation | | 1900 mg (ethanol) | | - | - | | 380 mg/m ³ (ethanol) | | |
| Dermal | - | - | | - | - | | 343 mg/kg (ethanol) | | |
| Critical physi | cal para | meters: s | olubility, | flammability, co | rrosivity: | - | | | |
| | | 1 | | Co | nsumer | | | | |
| Route of | | | ute | Acute | | Chronic | Chronic | | |
| exposure: | | effec | t local | effect systemi | с | effect local | effect systemic | | |
| Oral | | - 950 m | a /m ³ | - | - | | 87 mg/kg bw/day (eth | anol) | |
| Inhalation | | (ethan | - | - | - | | 114 mg/m ³ (ethanol) | | |
| Dermal | | - | | - | - | | 206 mg/kg (ethanol) | | |
| PNEC | | | | | | | | | |
| Environment | al prote | ction targ | get | | PNEC | | | | |
| Fresh water | | | | | 0.96 mg/l (ethanol) | | | | |
| Freshwater s | ediment | S | | | 3.6 mg/kg (ethanol) | | | | |
| Marine wate | | | | | 0.79 mg/l (ethanol) | | | | |
| Marine sedin | nents | | | | 2.9 mg/kg (ethanol) | | | | |
| Food chain | | | | | 380-720 mg/kg (ethanol) | | | | |
| Microorganis | | ewage tre | eatment | | 580 mg/l (ethanol) | | | | |
| Soil (agricult | ural) | | | | 0.63 mg/kg (ethanol) | | | | |
| Air | | | | | no information available | | | | |
| | | | | | | | | | |
| 8.2 | Exposur | e control | S | | | | | | |
| 8.2.1. | Appropr | riate eng | ineering | controls | | | | | |
| | .1. Appropriate engineering controls Substance/mixture related measures to prevent exposure during identified uses: | | | In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers. | | | | | |
| | Structur exposur | | res to pre | event | In accord | lance with Section 7. | | | |



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| Orga | anisational measures | to prevent | Organizatio | on of work in order to r | educe other worke | er's |

| | Organisational measures to preve exposure: | ent | 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 mothods 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 ap | propriate, chemical-resistant protective gloves (EN 374). | | |
| | 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 t 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 | rmal hazards known. | | |
| 8.2.3. | Environmental exposure controls | | | | |
| | Substance/mixture related measures to prevent exposure: | See Se | ction 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 ace. | | |
| | Technical measures to prevent exposure: | See Se | ction 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: | colourless | No information available | | | |
| | Odour/odour threshold: | ethanol like/no information available | No information available | | | |
| | Melting point / freezing point: | No information available | No information available | | | |



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| | Boiling point or initial boiling point and boiling range: | No information available | No information available | | | | |
|-----|---|-------------------------------------|--------------------------|--|--|--|--|
| | Flammability: | No information available | No information available | | | | |
| | Lover and upper explosion limit: | lower: 3.3 Vol % upper: 19 Vol % | No information available | | | | |
| | Flash point: | 21 °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: | in water completely miscible | 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: | ~ 0.867 (20°C) | No information available | | | | |
| | Relative vapour density: | No information available | No information available | | | | |
| | Particle characteristics: | No information available | No information available | | | | |
| 9.2 | Other information | Other information | | | | | |
| | Explosive properties: the vapours f | rom ethyl alcohol form an expl | osive mixture with air | | | | |

| SECTI | 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 | 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 | | | | | | | |
| | Acute toxicity: | | | | | | | |
| Route of exposure: Method Species Dose LD ₅₀ /LC ₅₀ or ATE _{mix} Exposure time Results | | | | | Results | | | |



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| | | | | | | | | | |
| Oral: | - | rat (ethan | ol) | LD ₅ | 0 | - | 7.0 | 60 mg/ | kg |
| Dermal: | - | rabbit (etha | nol) | LD ₅ | 0 | - | >20 |).000 m | g/l |
| Inhalation: | tion: - rat (ethar | | | | 0 | 4 h | >8 | .000 mg | g/l |
| Spacific to | araot organ to | oxicity – single e | vposuro | | • | | | | |
| Specific to | | Specific effects | exposure | | Target orga | n | No | te | |
| Oral: | | ation available | | No inf | ormation avail | | | | |
| Dermal: | | ation available | | | ormation avail | | | | |
| Inhalation: | | ation available | | | ormation avail | | _ | | |
| | | | | | | | | | |
| Aspiratior | hazard: | | No info | ormation a | available. | | | | |
| | | | | | | | | | |
| Irritation a | and corrosion | | | | | | | | |
| Ē | Exp | osure time | Sp | ecies | Evaluation | Method | N | ote | |
| Skin corrosion/irritatior | · - | | - | | - | - | - | | |
| Serious eye | 1. | | | | | | | | |
| damage/irritation | - | | - | | - | - | - | | |
| | | | | | | | | | |
| Sensitizat | | | | | | | | | |
| Skin sensitization: | | o information a | | | | | | | |
| Respiratory sensiti | zation: N | o information a | ivailable. | | | | | | |
| Sumatam | c valated to th | a physical sha | mical and | dtovicolo | nical character | istics | | | |
| Symptom | | ne physical, che ion of great | | | - | | kenness | euphor | ia |
| Oral exposure: | unconsc | iousness and al g may occur. Re | cohol po | isoning. Ir | case of swallo | wing great q | uantities, na | ausea a | |
| Dermal exposure: | After pr cracking | olonged or re of skin. | peated e | exposure | symptoms ma | iy include: c | lefatting, d | ryness | an |
| Inhalation exposur | e: Inhalatic membra | on of great quan ines. | ntities ma | y cause di | zziness, eupho | ria and mild i | rritation of t | he muc | :ou |
| Eye exposure: | May cau | se irritation and | d redness | 5. | | | | | |
| Reneated | dose toxicity | (subacute, sube | chronic (| -hronic) | | | | | |
| Nepealeu | Dose | Exposure | | | Method | Evaluati | 00 | Note | |
| | DOSe | time | spe | ecies | wiethou | Evaluali | | NOLE | |



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| 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 | - |
| Chronic dermal | No information available | No information available | No information available | No information available | No information available | - |
| Chronic inhalation | No information available | No information available | No information available | No information available | No information available | - |

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



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| | CMR effects (carcinogenicity; mutagenicit | ty; re | eproductive toxicity) | | | |
|---------|--|---|---|--|--|--|
| | Carcinogenicity: | Bas | sed on available data, the classification criteria are not met. | | | |
| | Mutagenicity in vitro: | Bas | sed on available data, the classification criteria are not met. | | | |
| | Genotoxicity: | Bas | sed on available data, the classification criteria are not met. | | | |
| | Mutagenicity in vivo: | Bas | sed on available data, the classification criteria are not met. | | | |
| | Germ cell mutagenicity: | Bas | sed on available data, the classification criteria are not met. | | | |
| | Reproductive toxicity: | Based on available data, the classification criteria are not met. | | | | |
| | Summary of evaluation of the C properties: | MR Based on available data, the classification criteria are no 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. Ecological information | | | | | | | | | | |
|------------------------------------|------------------|------------------|--------------------------|--------------------------------|-------------------------------|------|--|--|--|--|
| 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 | - | | | | |



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|--|---|----------------------------------|------------|-------------|--------------|--------|--------------------------|------------------|------------|---------------|------|
| Crustacea: EC ₅₀ 48 hours No information available | | | | | | | | | | | |
| Crustacea: EC ₃₀ 48 hours No information available information available No information | 6 | Version: |)22 | 05 Dec 20 | vision date: | Re | | 170-X** | H | duct code: | Pro |
| Algae/aquatic plants IC ₅₀ 72 hours No information available - </td <td></td> <td>_</td> <td></td> <td>information</td> <td></td> <td></td> <td>48 hours</td> <td>EC₅₀</td> <td></td> <td>stacea:</td> <td>Cru</td> | | _ | | information | | | 48 hours | EC ₅₀ | | stacea: | Cru |
| 12.2 Persistence and degradability Abiotic degradation Degradation half-lives Method Evaluation Note Marine water No information available No information available No information available No information available - Fresh water No information available No information available No information available No information available - Air No information available No information available No information available No information available - Soil No information available No information available No information available - - Biodegradation Time (days) Method Evaluation Note No information available No information available No information available - % Degradation Time (days) Method Evaluation Note information available No information available No information available No information available - - % Degradation Time (days) Method Evaluation Note available No information available Available Available - | | _ | | information | | | 72 hours | IC ₅₀ | lants | ae/aquatic pl | Alg |
| Abiotic degradation Degradation half-lives Method Evaluation Note Marine water No information available No information available No information available No information available - Fresh water No information available No information available No information available No information available - Air No information available No information available No information available - - Soil No information available No information available No information available - - Soil No information available No information available No information available - - Soil No information available No information available No information available - - Biodegradation Time (days) Method Evaluation No information available - No information available No information available No information available No information available - % Degradation Time (days) Method Evaluation No information available - No information available - - - | | - | - | - | | - | - | - | S | er organisms | Oth |
| Abiotic degradation Degradation half-lives Method Evaluation Note Marine water No information available No information available No information available No information available - Fresh water No information available No information available No information available No information available - Air No information available No information available No information available - - Soil No information available No information available No information available - - Soil No information available No information available No information available - - Soil No information available No information available No information available - - Biodegradation Time (days) Method Evaluation No information available - No information available No information available No information available No information available - % Degradation Time (days) Method Evaluation No information available - No information available - - - | | | | | | | bility | nd degrada | ence ai | 2 Persiste | 12.2 |
| Degradation half-lives Method Evaluation Note Marine water No information available - Fresh water No information available No information available No information available No information available - Air No information available No information available No information available No information available - Soil No information available No information available No information available - Soil No information available No information available No information available - % Degradation Time (days) Method Evaluation No information available No information available No information available No information available No information available % Degradation Time (days) Method Evaluation No information available No information available No information available No information available No information available No information available No information a | | | | | | | 7 | - | | | |
| Marine water No information available No information available No information available No information available - Fresh water No information available No information available No information available No information available - Air No information available No information available No information available No information available - Soil No information available No information available No information available No information available - Soil No information available No information available No information available No information available - Biodegradation Time (days) Method Evaluation No information available No information available No information available No information available No information available No information available - % Degradation Time (days) Method Evaluation No information available No information available No information available No information available No information available Value No Information coefficient (log Kow) Value Concentration PH °C Metho | | Note | n | Evaluatio | Method | | nalf-lives | | | | |
| Fresh water No information available available available available available available available available - Air No information available - <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td colspan="2"></td> <td>rine water</td> <td>Mai</td> | | - | | | | | | | rine water | Mai | |
| Air No information available available available available Soil No information available No information available No information available - Biodegradation Time (days) Method Evaluation Note % Degradation Time (days) Method Evaluation Note No information available No information available No information available Note % Degradation Time (days) Method Evaluation Note No information available 12.3 Bioaccumulative potential Octanol-water partition coefficient (log Kow) Value Concentration pH °C Method Evaluation Note Log Pow: ~ Concentration pH °C Method Evaluation Note | | - | | | | | No information available | | | sh water | Fres |
| Soil No information available available available available Biodegradation % Degradation % Degradation No information available No information available available No information available available No information available No information available available No information available available available No information available available available No information available | | - | | | | | lo information available | | | | Air |
| % Degradation Time (days) Method Evaluation Note No information available 12.3 Bioaccumulative potential Octanol-water partition coefficient (log Kow) Octanol pH °C Method Evaluation Note Value Concentration pH °C Method Evaluation Note | | - | n . | | | | No information available | | | | Soil |
| No information available No information available No information available No information available 12.3 Bioaccumulative potential Octanol-water partition coefficient (log Kow) Value Concentration pH °C Method Evaluation Note Log Pow: ~ Image: No information available Image: No information available Image: No information available No information available | | | | | | | | on | radatio | Biodegr | |
| available availa | | Note | Evaluation | | Method | | (days) | Time (| n | 6 Degradation | % |
| Octanol-water partition coefficient (log Kow) Value Concentration pH °C Method Evaluation Note Log Pow: ~ | | | | | | | nformation | | | | |
| Octanol-water partition coefficient (log Kow) Value Concentration pH °C Method Evaluation Note Log Pow: ~ | | | | | | | | | | | |
| Value Concentration pH °C Method Evaluation Note Log Pow: ~ | | | | | | | al | ive potentia | umulat | Bioaccu | 12.3 |
| Log Pow: ~ The product of | | | | | ow) | log Ko | coefficient (| er partition o | l-wate | Octanol | |
| | | Note | ation | Evalu | Method | °C | рН | centration | Cond | Value | |
| | | The product do not bioaccumul | | - | | | _ | <u> </u> | | | |
| | | | | | | | | | | | |
| Bioconcentration factor (BCF) | | | | | | | (BCF) | tion factor (| centra | Bioconc | |
| ValueSpeciesMethodEvaluationNote | | Note | ion | Evaluat | Method | | | | | | |



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| Tradin | ig name: | | | | | | HISTANOL 70 | | | | | | |
|--|---|-----------------------------|-------------------------------|-----------------------------|------------------------|-----------------------------|-----------------------------|----------|--------------------------|------------------|----|----------|---|
| Produ | ct code: | H70- | X** | | Revis | sion da | ate: | 05 D | ec 202 | 22 | | Version: | 6 |
| BCF: 0. | 66 | No information available | | No information available | | No information available | | - | | | | | |
| | Chronic | ecotoxici | tv | | | | | | | | | | |
| | Value | | Dose | | xposure time | | ecies | Meth | nod | Evaluation | | Note | |
| Chroni | Chronic toxicity on fish LC ₅₀ | | No infor availa | mation able | No inforr availa | nation Ible | No inform availab | | No inform availat | | - | | |
| Chronic toxicity on crustacea (<i>Daphnia</i>) EC ₅₀ | | EC ₅₀ | No N information ir | | No inforr availa | nation Ible | No inform availab | | No inform availat | | - | | |
| 12.4 | Mobility | ı in soil | | | | | | | | | | | |
| | Known | or predict | ed distributi | on in e | environm | ental c | ompart | ments: | | | | | |
| | No info | rmation a | vailable | | | | | | | | | | |
| | Surface | tension: | | | | | | | | | | | |
| | Valu | e | °C | C | Concentration M | | | Metho | Method | | | Note | |
| | No informa available | | o formation ailable | | | | No information available | | | - | | | |
| | | | | | | | | | | | | | |
| | Adsorpt | ion / desc | orption | | | | | | | | | | |
| Transp | | A/D co | befficient constant | lo | og Kow | E٧ | vaporati | on rate | ٦ | Method | | Note | |
| Soil-wa | ater | No iı available | nformation | No ir availa | nformatic able | | o inform ailable | nation | No in availa | iformati ible | on | - | |
| Water- | air | No iı available | nformation | No ir availa | nformatic able | | o inform ailable | nation | No in availa | formati able | on | - | |
| Soil-air | - | No iı available | nformation | No ir availa | nformatic able | | No information available | | No information available | | on | - | |
| 12.5 | | | d vPvB asses e data, the p | | | ot cont | ain any | PBT or v | PvB su | bstance | S. | | |



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| Trading name: | HISTANOL 70 | | | | | | | | |
|---------------|-------------|----------------|-------------|----------|---|--|--|--|--|
| Product code: | H70-X** | Revision date: | 05 Dec 2022 | Version: | 6 | | | | |

| 12.6. Endocrine disrupting properties | | | | | | | |
|--|---|--|--|--|--|--|--|
| | | | | | | | |
| Based on available data, does not contain endocrine disruptors. | | | | | | | |
| | | | | | | | |
| 12.7. Other adverse effects | | | | | | | |
| Do not let the product or its residues reach sewer system, waterways and soil. | | | | | | | |
| | | | | | | | |
| 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: | | | | | | | |
| Packaging that contains residual hazardous substances or is contaminated with hazardous substan | ces | | | | | | |
| | | | | | | | |
| 13.1.3. Waste treatment – relevant information: | Waste treatment – relevant information: | | | | | | |
| No information available | 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 colle authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. So the packaging to the collectors authorized by the ministry in charge. Unused product residues m burnt. | bmit | | | | | | |
| 13.1.6. Relevant Community provisions: | | | | | | | |
| Disposal must be made according to official regulations. | | | | | | | |
| | | | | | | | |
| SECTION 14 TRANSPORT INFORMATION | | | | | | | |
| Transporting/shipment by road (ADR) | | | | | | | |
| UN number: 1170 | | | | | | | |
| UN proper shipping name: Ethanol solution | | | | | | | |
| Transport hazard class(es): 3 | | | | | | | |
| Packing group: II | | | | | | | |



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| Trading name: | HISTANOL 70 | | | | | | | | |
|---------------------------------------|--|------------------|----------------|-------------|----------|---|--|--|--|
| Product code: | H70-X** | | Revision date: | 05 Dec 2022 | Version: | 6 | | | |
| | 1 | | 1 | 1 | | | | | |
| Environmentally ha | zardous: | - | | | | | | | |
| Special precautions | for user: | - | | | | | | | |
| Transporti | ng/shipment by rail (RI | ID) | | | | | | | |
| UN number: | | 117 | 0 | | | | | | |
| UN proper shipping | g name: | Eth | anol solution | | | | | | |
| Transport hazard cl | ass(es): | 3 | | | | | | | |
| Packing group: | | II | | | | | | | |
| Environmentally ha | zardous: | - | | | | | | | |
| Special precautions | for user: | - | | | | | | | |
| Inland wat | erway transport (ADN) | | | | | | | | |
| UN number: | | 117 | 0 | | | | | | |
| UN proper shipping | g name: | Eth | anol solution | | | | | | |
| Transport hazard cl | ass(es): | 3 | | | | | | | |
| Packing group: | | II | | | | | | | |
| Environmentally ha | zardous: | - | | | | | | | |
| Special precautions | for user: | - | | | | | | | |
| Transporti | ng/shipment by sea (IN | /IDG) | | | | | | | |
| UN number: | | 117 | 0 | | | | | | |
| UN proper shipping | g name: | Ethanol solution | | | | | | | |
| Transport hazard cl | ass(es): | 3 | | | | | | | |
| Packing group: | | 11 | | | | | | | |
| Environmentally ha | zardous: | - | | | | | | | |
| Special precautions | for user: | - | | | | | | | |
| Transport in bulk a of MARPOL 73/78 a | according to Annex II and the IBC code: | - | | | | | | | |
| Transporti | ng/shipment by air (IC | AO-T | I/IATA-DGR) | | | | | | |
| UN number: | | 117 | 0 | | | | | | |
| UN proper shipping | g name: | Eth | anol solution | | | | | | |
| Transport hazard cl | ass(es): | 3 | | | | | | | |
| Packing group: | | II | | | | | | | |
| Environmentally ha | zardous: | - | | | | | | | |
| Special precautions | for user: | - | | | | | | | |
| Further information | : - | | | | | | | | |

SECTION 15. Regulatory information



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| Trading name: | HISTANOL 70 | | | | | | |
|---------------|-------------|----------------|-------------|----------|---|--|--|
| Product code: | H70-X** | Revision date: | 05 Dec 2022 | Version: | 6 | | |

| 15.1 | - | Safety, health and environmental regulations/legislation specific for the substance or mixture | | | |
|------|--|---|--|--|--|
| | <u> </u> | 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). REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); | | | |
| | Information according 19 guideline) | 99/13/EC about limitation of emissions of volatile organic compounds (VOC- | | | |
| | National legislation: | Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act | | | |
| 15.2 | Chemical safety assessme | ent | | | |
| | None | | | | |

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



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| Trading name: | | | HISTANOL 70 | | | | |
|-----------------------|------------------------------------|------------------------------|--|-------------------------|-----------------------|---|--|
| Product code: H70-X** | | H70-X** | Revision date: | 05 Dec 2022 | Version: | 6 | |
| 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 litera source of | ture references and data: | Manufacturer's MSDS file. | | | | |
| 16.4. | Classifica 1272/200 | • | sed to derive the classificat | on for mixture accordin | ig to Regulation (EC) | | |
| Classification | | | Classification procedure | | | | |
| - | | | - | | | | |
| 16.5. | Relevant | H statements (numb | er and full text) | | | | |
| | H: 2 | 225 | Highly flammable liquid and | d vapor. | | | |
| 16.6. | Training a | advice: | - | | | | |
| 16.7. | t . Further information: \ i | | ** "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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