

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Revision date: 07/08/2025 Supersedes version of: 12/05/2021 Version: 11.0

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

#### 1.1. Product identifier

Product form : Article

Product name : Fastin Elastin Assay kit

Type of product : Laboratory testing kit containing dyes, reagents, standards, etc.

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Relevant identified uses

Intended for general public

Main use category : Professional use

Use of the substance/mixture : Dye-binding method for the analysis of elastins

Uses advised against

Restrictions on use : Use only for intended applications.

#### 1.3. Details of the supplier of the safety data sheet

Biocolor Ltd
Catalyst Concourse Building 2
20 Queens Road
Titanic Quarter
BT3 9DT Belfast
United Kingdom
T +44 (0) 28 93369716

info@biocolor.co.uk, www.biocolor.co.uk

#### 1.4. Emergency telephone number

Emergency number : +44 (0) 28 93350258 (Mon-Fri 08:30-16:30)

| Country/Area   | Organisation/Company   | Address   | Emergency number | Comment                           |
|----------------|--|---|------------------|-----------------------------------|
| United Kingdom | National Poisons Information Service<br>(Birmingham Centre)<br>City Hospital                         | Dudley Road<br>B18 7QH                                    | 0344 892 0111    | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service<br>(Cardiff Centre)<br>University Hospital Llandough            | Penlan Road<br>CF64 2XX                                   | 0344 892 0111    | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service<br>(Edinburgh Centre)<br>Royal Infirmary of Edinburgh           | Little France Crescent<br>EH16 4SA                        | 0344 892 0111    | Only for healthcare professionals |
| United Kingdom | Guy's & St Thomas' Poisons Unit<br>Medical Toxicology Unit, Guy's & St<br>Thomas' Hospital Trust     | Avonley Road<br>SE14 5ER                                  | +44 20 7188 7188 |                                   |
| United Kingdom | National Poisons Information Service<br>(Newcastle Centre)<br>Regional Drugs and Therapeutics Centre | 16/17 Framlington Place<br>Newcastle-upon-Tyne<br>NE2 4AB | 0344 892 0111    | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service<br>(Belfast Centre)<br>Royal Victoria Hospital                  | Grosvenor Road<br>BT12 6BA                                | 0344 892 0111    | Only for healthcare professionals |
| United Kingdom | NHS 111/NHS 24/NHS Direct  |   | 111<br>0845 4647 | or call a doctor                  |

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3

Skin corrosion/irritation, Category 1, Sub-Category 1A

Serious eye damage/eye irritation, Category 1

Specific target organ toxicity – Single exposure, Category 3,

Nationalis

Narcosis

Specific target organ toxicity – Single exposure, Category 3,

Respiratory tract irritation

Hazardous to the aquatic environment – Chronic Hazard, H411

Category 2

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

None under normal use.

#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



H335





GHS02

GHS05 GHS07

GHS09

Signal word (CLP) : Danger

Contains : trichloroacetic acid; oxalic acid dihydrate; hydrochloric acid; propan-1-ol; guanidinium

chloride

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P260 - Do not breathe vapours, spray.

P264 - Wash hands thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective clothing, eye protection, face protection.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER, a doctor. P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

Extra phrases : The classification, labelling and advice given for this kit is based on the following hazardous

components:

1x25ml bottle Precipitating Reagent H314 1A, H335, H411 1x28ml bottle Dye Dissociation Reagent H315, H226, H318, H336.

Child-resistant fastening : Applicable Tactile warning : Applicable

### 2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

07/08/2025 (Revision date) EN (English) 2/16

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component   |  |
|---|--|
| ` ,   | trichloroacetic acid (76-03-9), hydrochloric acid (7647-01-0), propan-1-ol (71-23-8), guanidinium chloride (50-01-1) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | trichloroacetic acid (76-03-9), hydrochloric acid (7647-01-0), propan-1-ol (71-23-8), guanidinium chloride (50-01-1) |

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

| Name   | Product identifier  | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP]   |
|--|---|---------|---|
| propan-1-ol substance with national workplace exposure limit(s) (GB)   | CAS-No.: 71-23-8<br>EC-No.: 200-746-9<br>EC Index-No.: 603-003-00-0   | 30 – 40 | Flam. Liq. 2, H225<br>Eye Dam. 1, H318<br>STOT SE 3, H336   |
| guanidinium chloride   | CAS-No.: 50-01-1<br>EC-No.: 200-002-3<br>EC Index-No.: 607-148-00-0   | 20 – 30 | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Irrit. 2, H319 Skin Irrit. 2, H315   |
| trichloroacetic acid   | CAS-No.: 76-03-9<br>EC-No.: 200-927-2<br>EC Index-No.: 607-004-00-7   | 5 – 15  | Skin Corr. 1A, H314<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410   |
| oxalic acid dihydrate  | CAS-No.: 6153-56-6<br>EC-No.: 612-167-2                               | 5 – 15  | Acute Tox. 4 (Oral), H302 (ATE=1080 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Corr. 1, H314 Eye Dam. 1, H318 |
| hydrochloric acid<br>substance with national workplace exposure limit(s)<br>(GB); substance with a Community workplace<br>exposure limit | CAS-No.: 7647-01-0<br>EC-No.: 231-595-7<br>EC Index-No.: 017-002-01-X | 5 – 15  | Skin Corr. 1B, H314<br>STOT SE 3, H335  |

| Specific concentration limits: |   |   |
|--------------------------------|---|---|
| Name                           | Product identifier  | Specific concentration limits (%)   |
| trichloroacetic acid           | CAS-No.: 76-03-9<br>EC-No.: 200-927-2<br>EC Index-No.: 607-004-00-7   | (1 ≤ C ≤ 100) STOT SE 3; H335   |
| hydrochloric acid              | CAS-No.: 7647-01-0<br>EC-No.: 231-595-7<br>EC Index-No.: 017-002-01-X | $(10 \le C < 25)$ Skin Irrit. 2; H315<br>$(10 \le C < 25)$ Eye Irrit. 2; H319<br>$(10 \le C \le 100)$ STOT SE 3; H335<br>$(25 \le C \le 100)$ Skin Corr. 1B; H314 |

Comments

: The classification, labelling and advice given for this kit is based on the following hazardous components:

1x25ml bottle Precipitating Reagent H314 1A, H335, H411 1x28ml bottle Dye Dissociation Reagent H315, H226, H318, H336

Full text of H- and EUH-statements: see section 16

07/08/2025 (Revision date) EN (English) 3/16

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call a doctor.

First-aid measures after skin contact : Take off contaminated clothing and wash it before reuse. Gently wash with plenty of soap

and water. Get immediate medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact,

immediately rinse eyes with plenty of water for at least 15 minutes. Get immediate medical

advice/attention.

First-aid measures after ingestion : If swallowed: rinse mouth. Do NOT induce vomiting. Drink plenty of water. Get medical

advice/attention if you feel unwell.

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

Symptoms/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Causes severe skin burns and eye damage.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : None.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing agent suitable for surrounding fire. Dry chemical, CO2, or water spray or

regular foam.

Unsuitable extinguishing media : None.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

## 5.3. Advice for firefighters

Firefighting instructions : Do not allow run-off from fire-fighting to enter drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use self-contained breathing apparatus and chemically protective clothing. Do not breathe vapours. Avoid contact with skin and eyes. Ventilate the area thoroughly. No flames, no

sparks. Eliminate all sources of ignition.

For non-emergency personnel

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : No action shall be taken without appropriate training or involving any personal risk. Do not

get in eyes, on skin, or on clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Wear personal protective equipment. Stop leak if safe to do so. Ventilate area. Clear up spills immediately and dispose of waste safely. Follow precautions for safe handling

described in this safety data sheet. Always wash hands after handling the product.

07/08/2025 (Revision date) EN (English) 4/16

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

#### 6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses. Toxic to aquatic life with long lasting effects.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Contain or absorb spilled liquid with earth or other absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. After cleaning, flush traces away with water. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 6.4. Reference to other sections

SECTION 8. SECTION 11. SECTION 13.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling

: Avoid contact with skin and eyes. Avoid breathing vapours. Wear protective gloves, protective clothing, eye protection, face protection. Keep away from heat, hot surfaces,

Hygiene measures

: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Take off immediately all contaminated clothing and wash it before reuse.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible products

: Keep away from food, drink and animal feedingstuffs.

sparks, open flames and other ignition sources. No smoking.

#### 7.3. Specific end use(s)

Dye-binding method for the analysis of elastins.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

National occupational exposure and biological limit values

| Fastin Elastin Assay kit                           |   |  |
|--|---|--|
| United Kingdom - Occupational Exposure Limits      |   |  |
| Local name   | Propan-1-ol   |  |
| WEL TWA (OEL TWA)                                  | 500 mg/m³   |  |
|  | 200 ppm   |  |
| WEL STEL (OEL STEL)                                | 625 mg/m³   |  |
|  | 250 ppm   |  |
| Remark   | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity) |  |
| Regulatory reference                               | EH40/2005 (Fourth edition, 2020). HSE   |  |
| hydrochloric acid (7647-01-0)                      |   |  |
| EU - Indicative Occupational Exposure Limit (IOEL) |   |  |
| Local name   | Hydrogen chloride   |  |
| IOEL TWA   | 8 mg/m³   |  |
|  | 5 ppm   |  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| hydrochloric acid (7647-01-0)                 |   |  |
|---|---|--|
| IOEL STEL                                     | 15 mg/m³  |  |
|   | 10 ppm  |  |
| Regulatory reference                          | COMMISSION DIRECTIVE 2000/39/EC   |  |
| United Kingdom - Occupational Exposure Limits |   |  |
| Local name                                    | Hydrogen chloride   |  |
| WEL TWA (OEL TWA)                             | 2 mg/m³ gas and aerosol mists   |  |
|   | 1 ppm gas and aerosol mists   |  |
| WEL STEL (OEL STEL)                           | 8 mg/m³ gas and aerosol mists   |  |
|   | 5 ppm gas and aerosol mists   |  |
| Regulatory reference                          | EH40/2005 (Fourth edition, 2020). HSE   |  |
| propan-1-ol (71-23-8)                         |   |  |
| United Kingdom - Occupational Exposure Limits |   |  |
| Local name                                    | Propan-1-ol   |  |
| WEL TWA (OEL TWA)                             | 500 mg/m³   |  |
|   | 200 ppm   |  |
| WEL STEL (OEL STEL)                           | 625 mg/m³   |  |
|   | 250 ppm   |  |
| Remark  | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity) |  |
| Regulatory reference                          | EH40/2005 (Fourth edition, 2020). HSE   |  |

#### DNFL and PNFC

| DNEL and PNEC                            |                            |  |
|--|----------------------------|--|
| richloroacetic acid (76-03-9)            |                            |  |
| DNEL/DMEL (Workers)                      |                            |  |
| Acute - systemic effects, dermal         | 1.41 mg/kg bodyweight/day  |  |
| Acute - systemic effects, inhalation     | 124.3 mg/m³                |  |
| Acute - local effects, dermal            | 5 % in mixture             |  |
| Long-term - systemic effects, dermal     | 1.41 mg/kg bodyweight/day  |  |
| Long-term - systemic effects, inhalation | 124.3 mg/m³                |  |
| DNEL/DMEL (General population)           |                            |  |
| Acute - systemic effects, dermal         | 0.705 mg/kg bodyweight/day |  |
| Acute - systemic effects, inhalation     | 61.3 mg/m³                 |  |
| Acute - systemic effects, oral           | 0.705 mg/kg bodyweight/day |  |
| Acute - local effects, dermal            | 5 % in mixture             |  |
| Long-term - systemic effects,oral        | 0.705 mg/kg bodyweight/day |  |
| Long-term - systemic effects, inhalation | 61.3 mg/m³                 |  |
| Long-term - systemic effects, dermal     | 0.705 mg/kg bodyweight/day |  |
| Long-term - local effects, dermal        | 5 % in mixture             |  |
| PNEC (Water)                             |                            |  |
| PNEC aqua (freshwater)                   | 0.17 μg/l                  |  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| trichloroacetic acid (76-03-9)  |   |  |
|---|---|--|
| PNEC aqua (marine water)  | 0.017 μg/l  |  |
| PNEC aqua (intermittent, freshwater)  | 2.7 μg/l  |  |
| PNEC (Sediment)   |   |  |
| PNEC sediment (freshwater)  | 0.143 μg/kg dw  |  |
| PNEC sediment (marine water)  | 0.0143 μg/kg dw   |  |
| PNEC (Soil)   |   |  |
| PNEC soil   | 20 μg/kg dw   |  |
| PNEC (Oral)   |   |  |
| PNEC oral (secondary poisoning)   | 23.5 mg/kg food   |  |
| PNEC (STP)  |   |  |
| PNEC sewage treatment plant   | 100 mg/l  |  |
| hydrochloric acid (7647-01-0)   |   |  |
| DNEL/DMEL (Workers)   |   |  |
| Acute - local effects, inhalation   | 15 mg/m³  |  |
| Long-term - local effects, inhalation   | 8 mg/m³   |  |
| DNEL/DMEL (General population)  |   |  |
| Acute - local effects, inhalation   | 15 mg/m³  |  |
| Long-term - local effects, inhalation   | 8 mg/m³   |  |
| guanidinium chloride (50-01-1)  |   |  |
| DNEL/DMEL (Workers)   |   |  |
| Acute - systemic effects, inhalation  | 10.5 mg/m³  |  |
| Long-term - systemic effects, dermal  | 1 mg/kg bodyweight/day  |  |
| Long-term - systemic effects, inhalation  | 3.5 mg/m³   |  |
| DNEL/DMEL (General population)  |   |  |
| Long-term - systemic effects,oral   | 0.5 mg/kg bodyweight/day  |  |
| Long-term - systemic effects, inhalation  | 0.87 mg/m³  |  |
| Long-term - systemic effects, dermal  | 0.5 mg/kg bodyweight/day  |  |
| potassium (E,E)-hexa-2,4-dienoate (24634-61-5)  |   |  |
| potassium (=j=) mona =j r anomouto (= rec r c r   | <u>'</u>  |  |
| DNEL/DMEL (Workers)   | ,   |  |
|   | 40 mg/kg bodyweight/day   |  |
| DNEL/DMEL (Workers)   |   |  |
| DNEL/DMEL (Workers)  Long-term - systemic effects, dermal   | 40 mg/kg bodyweight/day   |  |
| DNEL/DMEL (Workers)  Long-term - systemic effects, dermal  Long-term - systemic effects, inhalation   | 40 mg/kg bodyweight/day   |  |
| DNEL/DMEL (Workers)  Long-term - systemic effects, dermal  Long-term - systemic effects, inhalation  DNEL/DMEL (General population)   | 40 mg/kg bodyweight/day 17.63 mg/m³                                       |  |
| DNEL/DMEL (Workers)  Long-term - systemic effects, dermal  Long-term - systemic effects, inhalation  DNEL/DMEL (General population)  Long-term - systemic effects, oral   | 40 mg/kg bodyweight/day  17.63 mg/m³  2 mg/kg bodyweight/day              |  |
| DNEL/DMEL (Workers)  Long-term - systemic effects, dermal  Long-term - systemic effects, inhalation  DNEL/DMEL (General population)  Long-term - systemic effects, oral  Long-term - systemic effects, inhalation | 40 mg/kg bodyweight/day  17.63 mg/m³  2 mg/kg bodyweight/day  52.17 mg/m³ |  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| potassium (E,E)-hexa-2,4-dienoate (24634-61-5) |                |  |
|--|----------------|--|
| PNEC (Water)                                   |                |  |
| PNEC aqua (freshwater)                         | 1 mg/l         |  |
| PNEC aqua (marine water)                       | 0.1 mg/l       |  |
| PNEC aqua (intermittent, freshwater)           | 4.8 mg/l       |  |
| PNEC (Sediment)                                |                |  |
| PNEC sediment (freshwater)                     | 3.6 mg/kg dwt  |  |
| PNEC sediment (marine water)                   | 0.36 mg/kg dwt |  |
| PNEC (Soil)                                    |                |  |
| PNEC soil                                      | 1.67 mg/kg dwt |  |
| PNEC (STP)                                     |                |  |
| PNEC sewage treatment plant                    | 10 mg/l        |  |

#### 8.2. Exposure controls

#### Appropriate engineering controls

#### Appropriate engineering controls:

Good standard of general ventilation.

#### Personal protection equipment

#### Personal protective equipment:

Gloves. Protective clothing.

## Personal protective equipment symbol(s):







#### Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses. ISO 16321-1

#### Skin protection

#### Hand protection:

Protective gloves made of latex. Nitrile rubber gloves, natural rubber gloves. PVC gloves. ISO 374-1

#### **Respiratory protection**

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Dye Reagent is red, all other components are colourless.

Odour Odourless. Odour threshold : Not available Melting point : Not available Freezing point : Not available Boiling point : Not available Flammability : Not available Lower explosion limit : Not available : Not available Upper explosion limit

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Flash point : > 32 °C Extrapolated from information in "Fire Protection Guide to Hazardous Materials",

13th Ed., page 325-57 (2002).

: Not available Auto-ignition temperature Decomposition temperature : Not available Not available рΗ Viscosity, kinematic Not available Solubility Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available : Not available Density Relative density Not available Relative vapour density at 20°C Not available Particle characteristics : Not applicable

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

None.

#### 10.2. Chemical stability

Stable under normal conditions of use.

#### 10.3. Possibility of hazardous reactions

None under normal use.

#### 10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## 10.5. Incompatible materials

Strong oxidizing agents. alkalis.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

| trichloroacetic acid (76-03-9)    |  |  |
|-----------------------------------|--|--|
| LD50 oral rat                     | 3320 mg/kg bodyweight Animal: rat, 95% CL: 3160 - 3480   |  |
| LD50 oral                         | 4970 mg/kg bodyweight Animal: mouse, 95% CL: 4700 - 5260   |  |
| oxalic acid dihydrate (6153-56-6) |  |  |
| LD50 oral rat                     | 1080 mg/kg   |  |
| guanidinium chloride (50-01-1)    |  |  |
| LD50 dermal rabbit                | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| Skin corrosion/irritation :       | Causes severe skin burns. |
|-----------------------------------|---------------------------|
| oxalic acid dihydrate (6153-56-6) |                           |
| рН                                | 1 @ 126.1 g/l @25 °C      |

Serious eye damage/irritation : Causes serious eye damage.

| oxalic acid dihydrate (6153-56-6) |                      |  |
|-----------------------------------|----------------------|--|
| рН                                | 1 @ 126.1 g/l @25 °C |  |
| Pagniratory or skin sansitisation | · Not classified     |  |

Respiratory or skin sensitisation Germ cell mutagenicity : Not classified : Not classified Carcinogenicity Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.

| hydrochloric acid (7647-01-0) |                                    |  |
|-------------------------------|------------------------------------|--|
| STOT-single exposure          | May cause respiratory irritation.  |  |
| propan-1-ol (71-23-8)         |                                    |  |
| STOT-single exposure          | May cause drowsiness or dizziness. |  |

STOT-repeated exposure : Not classified

| guanidinium chloride (50-01-1) |  |  |
|--------------------------------|--|--|
| NOAEL (oral, rat, 90 days)     | 100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-   |  |
|                                | Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents) |  |

Aspiration hazard : Not classified

#### 11.2. Information on other hazards

Other information

Other information : The classification, labelling and advice given for this kit is based on the following hazardous

components:

1x25ml bottle Precipitating Reagent H314 1A, H335, H411 1x28ml bottle Dye Dissociation Reagent H315, H226, H318, H336

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Additional information

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Toxic to aquatic life with long lasting effects.

: The classification, labelling and advice given for this kit is based on the following hazardous

components:

1x25ml bottle Precipitating Reagent H314 1A, H335, H411 1x28ml bottle Dye Dissociation Reagent H315, H226, H318, H336.

| oxalic acid dihydrate (6153-56-6) |   |  |
|-----------------------------------|---|--|
| EC50 - Crustacea [1]              | 137 mg/l  |  |
| guanidinium chloride (50-01-1)    |   |  |
| EC50 - Crustacea [1]              | 70.2 mg/l Test organisms (species): Daphnia magna   |  |
| EC50 72h - Algae [1]              | 11.8 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |  |
| EC50 72h - Algae [2]              | 33.5 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| guanidinium chloride (50-01-1) |   |
|--------------------------------|---|
| NOEC (chronic)                 | 2.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d'         |
| NOEC chronic fish              | ≥ 181 mg/l Test organisms (species): Pimephales promelas Duration: '35 d' |

## 12.2. Persistence and degradability

| Fastin Elastin Assay kit          |                        |
|-----------------------------------|------------------------|
| Persistence and degradability     | Rapidly degradable     |
| trichloroacetic acid (76-03-9)    |                        |
| Persistence and degradability     | Not rapidly degradable |
| oxalic acid dihydrate (6153-56-6) |                        |
| Persistence and degradability     | Not rapidly degradable |
| hydrochloric acid (7647-01-0)     |                        |
| Persistence and degradability     | Not rapidly degradable |
| propan-1-ol (71-23-8)             |                        |
| Persistence and degradability     | Not rapidly degradable |
| guanidinium chloride (50-01-1)    |                        |
| Persistence and degradability     | Not rapidly degradable |

## 12.3. Bioaccumulative potential

| Fastin Elastin Assay kit  |                           |
|---------------------------|---------------------------|
| Bioaccumulative potential | Bioaccumulation unlikely. |

## 12.4. Mobility in soil

| Fastin Elastin Assay kit |  |
|--------------------------|--|
| Ecology - soil           | Miscible with water. Expected to be highly mobile in soil. |

#### 12.5. Results of PBT and vPvB assessment

| Fastin Elastin Assay kit  |  |
|---|--|
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII         |  |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII        |  |
| Component   |  |
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | trichloroacetic acid (76-03-9), hydrochloric acid (7647-01-0), propan-1-ol (71-23-8), guanidinium chloride (50-01-1) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | trichloroacetic acid (76-03-9), hydrochloric acid (7647-01-0), propan-1-ol (71-23-8), guanidinium chloride (50-01-1) |

## 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

No additional information available

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods

**HP Code** 

- : This material and its container must be disposed of as hazardous waste. Incineration is recommended however disposal methods must take into account the substances added to the kit by the end user. Dyes must never be disposed of to drains or water courses.
- : HP3 "Flammable:"
  - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
  - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
  - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
  - flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
  - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
  - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
  - HP6 "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
  - HP8 "Corrosive:" waste which on application can cause skin corrosion.
  - HP14 "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

|  | DG / IATA / ADIN / IXID  |  |  |  |
|--|--|--|--|--|
| ADR  | IMDG   | IATA   | ADN  | RID  |
| 14.1. UN number or ID n  | umber  |  |  |  |
| UN 3316  | UN 3316  | UN 3316  | UN 3316  | UN 3316  |
| 14.2. UN proper shippin  | g name   |  |  |  |
| CHEMICAL KIT   | CHEMICAL KIT   | Chemical kit   | CHEMICAL KIT   | CHEMICAL KIT   |
| Transport document descr   | iption   |  |  |  |
| UN 3316 CHEMICAL KIT,<br>9, II, (E),<br>ENVIRONMENTALLY<br>HAZARDOUS | UN 3316 CHEMICAL KIT,<br>9, II, MARINE<br>POLLUTANT/ENVIRONME<br>NTALLY HAZARDOUS                                | UN 3316 Chemical kit, 9, II,<br>ENVIRONMENTALLY<br>HAZARDOUS | UN 3316 CHEMICAL KIT,<br>9, II, ENVIRONMENTALLY<br>HAZARDOUS | UN 3316 CHEMICAL KIT,<br>9, II, ENVIRONMENTALLY<br>HAZARDOUS |
| 14.3. Transport hazard   | class(es)  |  |  |  |
| 9  | 9  | 9  | 9  | 9  |
| **************************************                               | **************************************   | **************************************                       | **************************************                       | <u>*************************************</u>                 |
| 14.4. Packing group  |  |  |  |  |
| II   | II   | II   | II   | II   |
| 14.5. Environmental haz  | zards  |  |  |  |
| Dangerous for the environment: Yes                                   | Dangerous for the<br>environment: Yes<br>Marine pollutant: Yes<br>EmS-No. (Fire): F-A<br>EmS-No. (Spillage): S-P | Dangerous for the environment: Yes                           | Dangerous for the environment: Yes                           | Dangerous for the environment: Yes                           |

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| ADR                         | IMDG        | IATA | ADN | RID |
|-----------------------------|-------------|------|-----|-----|
| No supplementary informatio | n available |      |     |     |

#### 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : M11

Special provisions (ADR) : 251, 340, 671
Limited quantities (ADR) : See SP 251
Excepted quantities (ADR) : See SP 340
Packing instructions (ADR) : P901
Transport category (ADR) : 2
Tunnel restriction code (ADR) : E
EAC code : 2Z

#### Transport by sea

Special provisions (IMDG) : 251, 340
Packing instructions (IMDG) : P901
Stowage category (IMDG) : A

#### Air transport

: E0 PCA Excepted quantities (IATA) : Y960 PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) : 1kg PCA packing instructions (IATA) 960 PCA max net quantity (IATA) : 10kg : 960 CAO packing instructions (IATA) CAO max net quantity (IATA) : 10kg Special provisions (IATA) : A44, A163 ERG code (IATA) : 9L

#### Inland waterway transport

Classification code (ADN) : M11
Special provisions (ADN) : 251, 340
Limited quantities (ADN) : See SP 251
Excepted quantities (ADN) : See SP 340
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : M11

Special provisions (RID): 251, 340, 671Limited quantities (RID): see SP251Excepted quantities (RID): see SP340Packing instructions (RID): P901Transport category (RID): See SP 671Hazard identification number (RID): 90

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## **SECTION 15: Regulatory information**

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

#### **EU-Regulations**

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

#### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

#### **Explosives Precursors Regulation (EU 2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (EC 273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.2. Chemical safety assessment

#### For the following substances of this mixture a chemical safety assessment has been carried out:

trichloroacetic acid hydrochloric acid propan-1-ol guanidinium chloride

## **SECTION 16: Other information**

## Indication of changes:

Sds reformatted, no change to classification.

| Indication of changes |                       |          |
|-----------------------|-----------------------|----------|
| Section               | Changed item          | Comments |
|                       | Supersedes version of | Modified |
|                       | Revision date         | Modified |
| 1.3                   | Supplier information  | Modified |
| 2.2                   | Extra phrases         | Modified |
| 6.1                   | Protective equipment  | Modified |
| 6.1                   | Emergency procedures  | Modified |
| 13.1                  | HP Code               | Added    |

| Abbreviations and acronyms:   |   |
|---|---|
| ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |   |
| ADR   | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS-No.   | Chemical Abstract Service number  |
| CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |   |
| DMEL  | Derived Minimal Effect level  |
| DNEL Derived-No Effect Level  |   |
| EC50  | Median effective concentration  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| Abbreviations and acronyms: |  |  |
|-----------------------------|--|--|
| EC-No.                      | European Community number  |  |
| IATA                        | International Air Transport Association  |  |
|                             | IBC Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO) |  |
| IMDG                        | International Maritime Dangerous Goods   |  |
| LC50                        | Median lethal concentration  |  |
| LD50                        | Median lethal dose   |  |
| NOAEL                       | No-Observed Adverse Effect Level   |  |
| PBT                         | Persistent Bioaccumulative Toxic   |  |
| PNEC                        | Predicted No-Effect Concentration  |  |
| REACH                       | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006                    |  |
| RID                         | Regulations concerning the International Carriage of Dangerous Goods by Rail   |  |
| vPvB                        | Very Persistent and Very Bioaccumulative   |  |

Data sources

: ECHA (European Chemicals Agency). Supplier's safety documents.

| Full text of H- and EUH-statements: |  |  |
|-------------------------------------|--|--|
| Acute Tox. 4 (Dermal)               | Acute toxicity (dermal), Category 4                                    |  |
| Acute Tox. 4 (Oral)                 | Acute toxicity (oral), Category 4                                      |  |
| Aquatic Acute 1                     | Hazardous to the aquatic environment – Acute Hazard, Category 1        |  |
| Aquatic Chronic 1                   | Hazardous to the aquatic environment – Chronic Hazard, Category 1      |  |
| Aquatic Chronic 2                   | Hazardous to the aquatic environment – Chronic Hazard, Category 2      |  |
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1                          |  |
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2                          |  |
| Flam. Liq. 2                        | Flammable liquids, Category 2  |  |
| Flam. Liq. 3                        | Flammable liquids, Category 3  |  |
| Skin Corr. 1                        | Skin corrosion/irritation, Category 1                                  |  |
| Skin Corr. 1A                       | Skin corrosion/irritation, Category 1, Sub-Category 1A                 |  |
| Skin Corr. 1B                       | Skin corrosion/irritation, Category 1, Sub-Category 1B                 |  |
| Skin Irrit. 2                       | Skin corrosion/irritation, Category 2                                  |  |
| STOT SE 3                           | Specific target organ toxicity – Single exposure, Category 3, Narcosis |  |
| H225                                | Highly flammable liquid and vapour.                                    |  |
| H226                                | Flammable liquid and vapour.   |  |
| H302                                | Harmful if swallowed.  |  |
| H312                                | Harmful in contact with skin.  |  |
| H314                                | Causes severe skin burns and eye damage.                               |  |
| H315                                | Causes skin irritation.  |  |
| H318                                | Causes serious eye damage.   |  |
| H319                                | Causes serious eye irritation.   |  |
| H335                                | May cause respiratory irritation.                                      |  |
|                                     |  |  |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

| Full text of H- and EUH-statements: |   |
|-------------------------------------|---|
| H336                                | May cause drowsiness or dizziness.                    |
| H400                                | Very toxic to aquatic life.                           |
| H410                                | Very toxic to aquatic life with long lasting effects. |
| H411                                | Toxic to aquatic life with long lasting effects.      |

Safety Data Sheet (SDS), EU, 2025

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.