

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

1.2.1. 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 extracted from mammalian sources.

1.2.2. Uses advised against

Restrictions on use : Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Biocolor Limited
8 Meadowbank Road
BT38 8YF Carrickfergus
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	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	

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

H226

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411
Full text of H statements : see section 16	

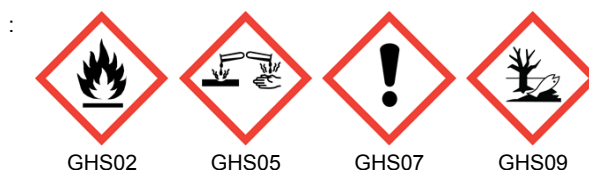
Adverse physicochemical, human health and environmental effects

None under normal use.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

Contains

Hazard statements (CLP)

Precautionary statements (CLP)

Extra phrases

- :
: Danger
: trichloroacetic acid; oxalic acid dihydrate; hydrochloric acid ... %; propan-1-ol; guanidinium chloride
: 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.
: 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.
: The classification, labelling and advice given for this kit is based on the following hazardous components:
1x30ml vial Precipitating Reagent H314 1A, H335, H411
1x30ml vial Dye Dissociation Reagent H315, H226, H318, H336.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

3.2. Mixtures

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

Specific concentration limits:

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

Comments : The classification, labelling and advice given for this kit is based on the following hazardous components:
1x30ml vial Precipitating Reagent H314 1A, H335, H411
1x30ml vial Dye Dissociation Reagent H315, H226, H318, H336

Full text of H-statements: see section 16

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.

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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.

6.1.1. For non-emergency personnel

- Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

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

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

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Incompatible products : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Dye-binding method for the analysis of elastins extracted from mammalian sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Fastin Elastin Assay kit	
United Kingdom - Occupational Exposure Limits	
Local name	Propan-1-ol
WEL TWA (mg/m ³)	500 mg/m ³
WEL TWA (ppm)	200 ppm
WEL STEL (mg/m ³)	625 mg/m ³
WEL STEL [ppm]	250 ppm
Remark (WEL)	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 (Third edition, 2018). HSE

propan-1-ol (71-23-8)	
United Kingdom - Occupational Exposure Limits	
Local name	Propan-1-ol
WEL TWA (mg/m ³)	500 mg/m ³
WEL TWA (ppm)	200 ppm
WEL STEL (mg/m ³)	625 mg/m ³
WEL STEL [ppm]	250 ppm
Remark (WEL)	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 (Third edition, 2018). HSE

potassium (E,E)-hexa-2,4-dienoate (24634-61-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	40 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	17.63 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	2 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	52.17 mg/m ³
Long-term - systemic effects, dermal	20 mg/kg bodyweight/day
Long-term - local effects, dermal	0.17 mg/cm ²
Long-term - local effects, inhalation	26.08 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.48 mg/l
PNEC aqua (marine water)	0.048 mg/l
PNEC aqua (intermittent, freshwater)	4.8 mg/l

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PNEC (Sediment)	
PNEC sediment (freshwater)	1.73 mg/kg dwt
PNEC sediment (marine water)	0.173 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:

Good standard of general ventilation.

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Insufficient ventilation: wear respiratory protection.

Hand protection:

Protective gloves made of latex. Nitrile rubber gloves, natural rubber gloves. PVC gloves. EN 374

Eye protection:

Chemical goggles or safety glasses. EN 166

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



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	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 32 °C Extrapolated from information in "Fire Protection Guide to Hazardous Materials", 13th Ed., page 325-57 (2002).
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available

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Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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 toxicological effects

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

oxalic acid dihydrate (6153-56-6)	
LD50 oral rat	1080 mg/kg

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness. May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Other information	: The classification, labelling and advice given for this kit is based on the following hazardous components: 1x30ml vial Precipitating Reagent H314 1A, H335, H411 1x30ml vial Dye Dissociation Reagent H315, H226, H318, H336.

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.
Additional information : The classification, labelling and advice given for this kit is based on the following hazardous components:
1x30ml vial Precipitating Reagent H314 1A, H335, H411
1x30ml vial Dye Dissociation Reagent H315, H226, H318, H336.

oxalic acid dihydrate (6153-56-6)

EC50 Daphnia 1	137 mg/l
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Fastin Elastin Assay kit

Bioaccumulative potential	Bioaccumulation unlikely.
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12.4. Mobility in soil

Fastin Elastin Assay kit

Ecology - soil	Miscible with water. Expected to be highly mobile in soil.
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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

12.6. Other adverse effects

Other adverse effects : None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : 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.

SECTION 14: Transport information






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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3316	UN 3316	UN 3316	UN 3316	UN 3316
14.2. UN proper shipping name				
CHEMICAL KIT	CHEMICAL KIT	Chemical kit	CHEMICAL KIT	CHEMICAL KIT

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Transport document description				
UN 3316 CHEMICAL KIT, 9, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 3316 CHEMICAL KIT, 9, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3316 Chemical kit, 9, II, ENVIRONMENTALLY HAZARDOUS	UN 3316 CHEMICAL KIT, 9, II, ENVIRONMENTALLY HAZARDOUS	UN 3316 CHEMICAL KIT, 9, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information 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
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-P
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Y960
PCA limited quantity max net quantity (IATA) : 1kg
PCA packing instructions (IATA) : 960
PCA max net quantity (IATA) : 10kg
CAO packing instructions (IATA) : 960
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, 671

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Limited quantities (RID)	: see SP251
Excepted quantities (RID)	: see SP340
Packing instructions (RID)	: P901
Transport category (RID)	: See SP 671
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
2.1		Removed	H302. Wrongly identified as a classification in pervious version
2.2		Modified	Number of vials and volumes
3.2		Modified	Number of vials and volumes
4.1		Modified	Number of vials and volumes
11.1		Modified	Number of vials and volumes
12.1		Modified	Number of vials and volumes

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
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
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

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Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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.
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.

SDS EU (REACH Annex II)

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.