

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

1.1. Product identifier

Product form : Article
Product name : Blyscan sGAG 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 sulphated proteoglycans and glycosaminoglycans.

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]

Skin corrosion/irritation, Category 2

H315

Blyscan sGAG Assay Kit

Safety Data Sheet

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

Serious eye damage/eye irritation, Category 1

H318

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)

:



GHS05

Signal word (CLP)

: Danger

Contains

: Sodium dodecyl sulphate; Sodium nitrite ; acetic acid; Ammonium sulphamidate

Hazard statements (CLP)

: H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statements (CLP)

: P264 - Wash hands thoroughly after handling.

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

P302+P352 - IF ON SKIN: Wash with plenty of water.

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 doctor, a POISON CENTER.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents and 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:

110ml Sodium dodecylsulphate solution H318

20ml Acetic acid solution H315, H319.

2.3. Other hazards

Other hazards which do not result in 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

Component

Sodium dodecyl sulphate (151-21-3)

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

Blyscan sGAG Assay Kit

Safety Data Sheet

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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
acetic acid substance with a Community workplace exposure limit	CAS-No.: 64-19-7 EC-No.: 200-580-7 EC Index-No.: 607-002-00-6	20 – 30	Flam. Liq. 3, H226 Skin Corr. 1A, H314
Ammonium sulphamidate	CAS-No.: 7773-06-0 EC-No.: 231-871-7	5 – 15	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)
Sodium dodecyl sulphate	CAS-No.: 151-21-3 EC-No.: 205-788-1 REACH-no: 01-2119489461-32	1 – 10	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
Sodium nitrite	CAS-No.: 7632-00-0 EC-No.: 231-555-9	1 – 5	Ox. Liq. 2, H272 Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Aquatic Acute 1, H400

Specific concentration limits

Name	Product identifier	Specific concentration limits
acetic acid	CAS-No.: 64-19-7 EC-No.: 200-580-7 EC Index-No.: 607-002-00-6	(10 ≤C < 25) Skin Irrit. 2, H315 (10 ≤C < 25) Eye Irrit. 2, H319 (25 ≤C < 90) Skin Corr. 1B, H314 (90 ≤C < 100) Skin Corr. 1A, H314

Comments : The substances are listed as the highest % present in any of the kit components. The classification, labelling and advice given for this kit is based on the following hazardous components:

110ml Sodium dodecylsulphate solution H318

20ml Acetic acid solution H315, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: The classification, labelling and advice given for this kit is based on the following hazardous components: 110ml Sodium dodecylsulphate solution H318 20ml Acetic acid solution H315, H319.
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. If symptoms persist call a doctor.
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	: None.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: None.

Blyscan sGAG Assay Kit

Safety Data Sheet

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

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 : Avoid contact with skin and eyes.

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.

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.

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

7.3. Specific end use(s)

Dye-binding method for the analysis of sulphated proteoglycans & glycosaminoglycans.

Blyscan sGAG Assay Kit

Safety Data Sheet

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

acetic acid (64-19-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Acetic acid
IOEL TWA	25 mg/m ³
IOEL TWA [ppm]	10 ppm
IOEL STEL	50 mg/m ³
IOEL STEL [ppm]	20 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Sodium dodecyl sulphate (151-21-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4060 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	285 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	24 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	85 mg/m ³
Long-term - systemic effects, dermal	2440 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.176 mg/l
PNEC aqua (marine water)	0.0176 mg/l
PNEC aqua (intermittent, freshwater)	0.055 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	6.97 mg/kg dwt
PNEC sediment (marine water)	0.697 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.29 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1.35 mg/l
Sodium nitrite (7632-00-0)	
PNEC (Water)	
PNEC aqua (freshwater)	5.4 µg/L
PNEC aqua (marine water)	6.16 µg/L

Blyscan sGAG Assay Kit

Safety Data Sheet

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

Sodium nitrite (7632-00-0)

PNEC aqua (intermittent, freshwater)

5.4 µg/L

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Good standard of general ventilation.

8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

EN 166

8.2.2.2. Skin protection

Hand protection:

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

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Dye Reagent is blue, the rest of the components are colourless.
Odour	: 20ml Acetic acid solution has an acetic acid odour, the rest of the components are odourless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: > 100 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available

Blyscan sGAG Assay Kit

Safety Data Sheet

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

Solubility	: Miscible with water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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

Sodium dodecyl sulphate (151-21-3)

LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
-----------------	--

acetic acid (64-19-7)

LC50 Inhalation - Rat [ppm]	5620 ppm/4h
-----------------------------	-------------

Blyscan sGAG Assay Kit

Safety Data Sheet

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

Ammonium sulphamidate (7773-06-0)	
LD50 oral rat	2500 mg/kg bodyweight
LD50 dermal rat	2000 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation.
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	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Other information	: The classification, labelling and advice given for this kit is based on the following hazardous components: 110ml Sodium dodecylsulphate solution H318 20ml Acetic acid solution H315, H319
-------------------	---

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)	: Not classified

Sodium dodecyl sulphate (151-21-3)	
LC50 - Fish [1]	29 mg/l Test organisms (species): Pimephales promelas
EC50 - Other aquatic organisms [1]	11.1 mg/l Test organisms (species): other aquatic crustacea:Pseudosida ramosa
EC50 72h - Algae [1]	> 120 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	53 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC chronic fish	≥ 1.357 mg/l Test organisms (species): Pimephales promelas Duration: '42 d'

Sodium nitrite (7632-00-0)	
LC50 - Fish [1]	0.54 – 26.3 mg/l
EC50 - Crustacea [1]	114.9 mg/l
EC50 72h - Algae [1]	100 mg/l
NOEC (chronic)	1.05 – 21 mg/l

Ammonium sulphamidate (7773-06-0)	
LC50 - Fish [1]	100 mg/l
EC50 - Crustacea [1]	100 mg/l
EC50 72h - Algae [1]	6.1 – 86 mg/l

12.2. Persistence and degradability

No additional information available

Blyscan sGAG Assay Kit

Safety Data Sheet

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

12.3. Bioaccumulative potential

Blyscan sGAG Assay Kit

Bioaccumulative potential	Bioaccumulation unlikely.
---------------------------	---------------------------

12.4. Mobility in soil

Blyscan sGAG Assay Kit

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

12.5. Results of PBT and vPvB assessment

Blyscan sGAG 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

Sodium dodecyl sulphate (151-21-3)	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. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

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 / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

Blyscan sGAG Assay Kit

Safety Data Sheet

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

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

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

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

Sodium dodecyl sulphate

SECTION 16: Other information

Indication of changes:

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

Indication of changes			
Section	Changed item	Change	Comments
3.2		Removed	Specific concentration limits for CAS-No.151-21-3
8.1		Added	OELs
11.1		Added	Toxicological information
12.1		Added	Toxicity data

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

Blyscan sGAG Assay Kit

Safety Data Sheet

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

Abbreviations and acronyms	
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
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. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Ox. Liq. 2	Oxidising Liquids, Category 2
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
H226	Flammable liquid and vapour.
H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Blyscan sGAG Assay Kit

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

H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet (SDS), EU

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.