

Atlas ClearSight Gold DNA Stain

Safety Data Sheet

Bioatlas Ltd info@bioatlas.com

Version 1

Previous version

Current version 1: 15.03.2021 Posted Date: 15.03.2021 Revision Date: 23.10.2023 Print Date: 15.03.2021

The mixture is not classified as dangerous. The safety data sheet is based on Article 32 (REACH) and is, therefore, voluntarily adopted in accordance with Annex II (EU No. 453/2010) Regulation (EC) No 1907/2006 (REACH).

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

1.1 Product identifiers

Product name: Atlas ClearSight Gold DNA Stain

Product Number: BH40701 Brand: Bioatlas

EC Substance Name:

EC number:

CAS reference number:

Not applicable

Not applicable

REACH reference number: A registration number is not available for this substance

as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later

registration deadline.

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

Identified uses: For laboratory and manufacturing use only.

1.3 Details of the supplier of the safety data sheet

Company: Bioatlas

Riia 181A Tartu, 50411 Estonia

Phone: +372 5562 4867 e-mail: info@bioatlas.com

1.4 Emergency telephone number

Emergency Phone: +372 5562 4867

* Within business hours: Monday to Friday, 8am to 5pm



SECTION 2: Substance or mixture possible hazards classification

2.1 Classification according to EC Directives 67/548 / EEC (DSD) and 1999/45 / EC (DPD):

Not a hazardous substance or mixture according to EC Directives 67/548 / EEC (DSD) and 1999/45 / EC (DPD)

2.2 Classification according to Regulation (EC) No 1272/2008 (CLP):

Signal word: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008

H-Statements: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

2.4 Additional hazards for humans and the environment:

2.4.1 Possible hazardous physicochemical effects: Unknown

2.4.2 Possible adverse effects on humans and possible symptoms: No data available

2.4.3 Possible harmful effects: No data available

SECTION 3: Composition / information on ingredients:

3.1 Chemical characterization:

Aqueous solution with inorganic and organic components.

3.2 Components

Name	REACH- RefNo.	CAS No.	EC No.	Proportion %	Classification according to 67/548/EEC and 1999/45 / EC; (EC)No1272/2008
Dimethyl sulfoxide	-	67-68-5	200-664-3	<65%	Xi; R63/R37/R38
Propylene glycol	-	57-55-6	200-338-0	<35%	-
Atlas ClearSight Gold DNA Stain*	-	-	-	<1%	-

^{*}No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 General information:



If skin irritation or other symptoms persist, consult a physician. Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes, carefully clean before reuse.



4.2 After inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.3 After skin contact:

In case of skin contact, rinse immediately with plenty of water. Consult a physician.

4.4 After eye contact:



Eye contact: Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

4.5 After swallowing:

Never give anything to an unconscious person. Do not induce vomiting. Rinse the mouth, spit out the fluid and drink plenty of water. Call a physician immediately and show him the safety data sheet.

4.6 Notes to physician:

Decontamination, symptomatic treatment. No specific antidote known.

4.7 Most important symptoms and effects, both acute and delayed.

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

SECTION 5: Firefighting measures

5.1 Suitable extinguishing media:



This product is not flammable. Use extinguishing agent suitable for type of surrounding fire: water spray, dry chemical or carbon dioxide, fire extinguishing foam, extinguishing powder.

5.2 Extinguishing media which must not be used for safety reasons:

No data available

5.3 Special hazards caused by the product, combustion products or resulting gases:



In the event of fire, toxic and corrosive gases - carbon monoxide, carbon dioxide, and sulphur oxides - can be released.

5.4 Special protective equipment for fire-fighting:



Wear protective clothing. Wear self-contained breathing apparatus for firefighting if necessary.



5.5 Additional information:

No data available.

SECTION 6: Accidental release measures

6.1 Personal precautions:

Avoid contact with skin, eyes and clothing, wear appropriate protective equipment. Ensure adequate ventilation. Avoid aerosol formation. For personal protection see section 8.

6.2 Environmental precautions:

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

6.3 Methods for cleaning up:

Soak up with absorbent material and dispose. Clean contaminated surfaces with water.

6.4 Reference to other sections.

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Handling:

7.1.1 Information for safe handling:

Inhalation of aerosols, contact with eyes, skin and clothing as well as prolonged or repeated exposure may cause irritation. Ensure that the working area is well ventilated. For precautions see section 2.2.

7.1.2 Information on fire and explosion protection:

See section 5.

7.1.3 Handling rules:

No special handling measures required

7.2 Storage:

7.2.1 Technical measures and storage conditions:

Keep container tightly closed and stored upright to prevent leakage. Always keep in containers of the same material as the original.

7.2.2 Packaging materials:

Packing materials must be tested for durability before use.

7.2.3 Requirements for storage rooms and containers:

Keep container tightly closed in a dry and well-ventilated place. If possible, keep in the original container. Do not use food containers because of the risk of confusion. Containers which are opened must be carefully resealed and kept upright to prevent leakage.



7.2.4 Further information on storage conditions:

Recommended storage temperature +4 °C. Protected from light

7.3 Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters:

Contains no relevant quantities of substances with occupational exposure limit values that have to be monitored at the workplace according to TRGS 900.

8.2 Exposure controls

Appropriate engineering controls:

Handle in accordance with Good Laboratory Practice. Wash hands before breaks and at the end of workday.

8.2.1 Personal protective equipment



Respiratory protection:

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards. Half masks according to EN 140 or full masks according to EN 136, with filters according to EN 143-P1.

Skin Handle use.



protection:

with suitable protective gloves. Gloves must be inspected prior to Damaged and worn protective gloves should be replaced immediately. Use proper glove removal technique (without touching

glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and Good Laboratory Practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Completely unsuitable are gloves made of fabric or leather. The following gloves are suitable:

For full contact:

Material:	Minimum layer thickness	Breakthrough time:
Nitrile rubber	0.35 mm	≥ 480 min
Latex	0.35 mm	≥ 480 min

For splash contact:

Material:	Minimum layer thickness	Breakthrough time:
Natural rubber	0.5 mm	≥ 120 min



Science of Life

Latex	0.5 mm	≥ 120 min
Polyvinyl chloride	0.5 mm	≥ 120 min
Nitrile rubber	0.2 mm	≥ 30 min



Eye protection:

Safety glasses with side-shields conforming to EN166 U

Body protection:

Suitable protective clothing. Special body protection generally not required.

General protective and hygienic measures

Do not eat, drink or smoke during working hours. Keep away from food and drink. Avoid contact with eyes and skin. Remove contaminated and soaked clothing immediately. Wash hands before breaks and after work.

8.2.2 Limitation of environmental exposure:

Prevent further leakage or spillage if safe to do so.

8.2.3 Limitation of end-user exposure:

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: Orange-red to brown, liquid

b) Odour:
c) Odour Threshold:
d) pH:
e) Melting point/freezing point:
f) Initial boiling point and boiling range:
g) Flash point:
h) Evaporation rate:
i) Flammability (solid, gas):

No data available
No data available
No data available
No data available

j) Upper/lower flammability

or explosive limits: No data available k) Vapour pressure: No data available I) Vapour density: No data available m) Relative density: No data available n) Water solubility: Soluble in water o) Partition coefficient: No data available p) Auto-ignition temperature: No data available g) Decomposition temperature: No data available r) Viscosity: No data available s) Explosive properties: No data available t) Oxidizing properties: No data available



9.2 Other safety information:

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

High pressure and temperatures. Stable under regular laboratory conditions. See section 7.

10.5 Materials to avoid

Strong acids, oxidation and reducing agents.

10.6 Hazardous decomposition products

Other decomposition products In the event of fire: see section 5

SECTION 11: Toxicological information

No data available.

11.1 Information on toxicological effects

11.1.1 The acute toxicity test

Inhalation: Aerosols may cause allergic type reactions in sensitized individuals. Ingestion: Repeated ingestion or excessive dosage may cause irritation of the gastrointestinal tract. Skin and eye contact: Generally, the product does not irritate the skin and eyes. Prolonged skin or eye contact may cause minor irritation.

Chemical name: Dimethyl sulfoxide

Parameter	Value	Species
LD50 oral	145000 mg/kg	Rat
LD ₅₀ dermal	40000 mg/kg	Rat

11.2.2 Corrosive and irritant effects

Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available

11.2.3 Respiratory or skin sensitization No data available



11.2.4 Aspiration hazard

No data available

11.2.5 Subacute and chronic toxicity: May cause injury to the liver and kidneys.

11.2.6 Carcinogenicity, mutagenicity and toxicity to reproduction mutagenicity: No cytotoxic or mutagenic effects could be detected.

Parameter	Value	Cell culture/ Species	Method	Remarks
In vitro bacterial mutation test	0,4-50 mg/plate	Salmonella typhimurium TA97/98/100/102	AMES-test	Non-mutagenic

No data available Carcinogenicity

Reproductive toxicity: No toxicological data are available on the

components of the product

No data available 11.3 Practical experience

11.4 General remarks:

When used and handled according to instructions, the product does not cause harmful effects according to our experience and current information.

SECTION 12: Ecological information

12.1 Toxicity No data available

12.2 Persistence and degradability No data available

> No data on biological and abiotic degradation are available for the components of the product

No data available 12.3 Bioaccumulative potential

12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

12.6 Other adverse effects No data available



12.7 General remarks:

When used and handled according to instructions, the product does not cause harmful effects according to our experience and current information.

SECTION 13: Disposal considerations

13.1 Product:

The allocation of a waste code number according to the European waste catalog should be done in consultation with the regional waste disposal company.

13.2 Packaging:

Residues in packages should be removed, preferably by rinsing with water, and after complete emptying in accordance with the regulations for waste disposal. Packaging which is not completely emptied must be disposed of in the form as determined by the regional waste disposal company.

SECTION 14: Transport information

14.1 UN number Not applicable

14.2 UN proper shipping name Not applicable

In accordance with GGVSEB, ADR / RID, IMDG / GGVSee, ICAO / IATA-DGR

ADR/RID, GGVSEB

IMDG / GGVSee

ICAO / IATA-DGR

Not dangerous good during shipping
Not dangerous good during shipping
Not dangerous good during shipping

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA None

14.4 Packaging group

ADR/RID, IMDG, IATA None

14.5 Environmental hazards

ADR/RID, IMDG, IATA None

14.6 Special precautions for userNo data available

SECTION 15: Regulatory information

15.1 EU regulations:

15.1.1 Chemical safety assessment according to Regulation (EC) No 1907/2006:



Substance safety assessments (CSA) according to Article 14 (1) of Regulation (EC) No 1907/2006 (REACH) for the components of the product are neither banned nor restricted

15.1.2 Classification and labeling according to directives 67/548 / EEC (DSD) and 1999/45 / EC (DPD):

Not a hazardous substance or mixture, see section 2

- 15.1.3 Classification and labeling according to Regulation (EC) No 1272/2008 (CLP): Not a hazardous substance or mixture, see section 2
- 15.1.4 Hazardous components which must be listed on the label.

15.1.5 Pictograms: None

Signal word: Not a hazardous substance or mixture according to Regulation (EC) No.

1272/2008

H-Statements: Not a hazardous substance or mixture according to Regulation (EC) No.

1272/2008

- 15.1.6 Special labeling of certain preparations: Neither banned nor restricted
- 15.1.7 Approvals and / or restrictions of use: Neither banned nor restricted
- 15.1.8 Information on Directive 1999/13 / EC (VOC Directive) on the limitation of VOC emissions: Neither banned nor restricted

SECTION 16: Other information

16.1 Training instructions:

Accordance with applicable laws and Good Laboratory Practices.

16.3 Recommended use (s) of application:

For research use only.

16.4 Further information and contact for technical information:

Department issuing data sheet:

Company: Bioatlas

Riia 181A Tartu, 51014 Estonia

Phone: +372 5562 4867 e-mail: info@bioatlas.com

Bioatlas Itd

Riia 181A Tartu. 51014 Estonia

Phone: +372 5562 4867 Contact person: Liane Viru e-mail: liane.viru@bioatlast.com



16.5 Data sources for the preparation of the safety data sheet:

European Chemical Substances Information System (ESIS),

Internet: http://ecb.jrc.ec.europa.eu/esis.

Hazardous substance information system of the trade associations (GESTIS), Internet:

http://www.hvbg.de/d/bia/gestis/stoffdb/index.html.

Hazardous Substances Database (HSDB) - U.S. National Library of Medicine, Internet: http://toxnet.nlm.nih.gov

Hommel interactive 4.0 - Handbook of Dangerous Goods, Internet: http://www.springer.com/dal/home/chemistry.

CRC Handbook of Chemistry and Physics, 88th Edition, 2007-2008,

Internet: http://www.hbcpnetbase.com.

16.6 Amended information and reasons for amendment:

Version number:

Previous version 1: 31.05.2013 Current version 2: 14.06.2017

The reason for the change: Voluntary preparation on the basis of Annex II to Regulation (EC) No 1907/2006 (REACH) and Annex I to Regulation No 1272/2008 (CLP). The safety data sheet is based on Article 32 (REACH) and is, therefore, voluntarily adopted in accordance with Annex II (EU No. 453/2010) Regulation (EC) No 1907/2006 (REACH).

16.7 Notes:

This information is only intended to describe the safety requirements of the product and is based on the present state of our knowledge. They do not constitute a guarantee for the characteristics of the product described in the sense of the statutory warranty regulations. Please refer to the respective product data sheets for the delivery properties. If the product mentioned in this Material Safety Data Sheet is mixed, mixed or processed with other materials, the data in this Material Safety Data Sheet may not be transferred to the new material, unless otherwise specified.

End of Safety Data Sheet