

# Atlas ClearSight Tablets with TAE

## Safety Data Sheet

Bioatlas Ltd

Version 1

Revision Date 13.08.2019

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Posted Date:

Print Date 06.10.2018

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

### 1.1 Product identifiers

Product name: Atlas ClearSight Tablets with TAE  
Product Number: BA50102  
Brand: Bioatlas  
EC Substance Name: Not applicable  
EC number: Not applicable  
CAS reference number: 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, 51014  
Estonia  
Phone: +372 5562 4867  
e-mail: [info@bioatlas.com](mailto: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 of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

H315 Skin irritation (Category 2)

H319 Serious eye irritation (Category 2)

For the full text of the H-Statements mentioned in this Section, see Section 15.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi Irritant R36/38  
 For the full text of the R-phrases mentioned in this Section, see Section 15.

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

Label elements, Labelling

Pictogram



Warning

Signal word

Hazard statement(s)

H302

Harmful if swallowed

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P201

Obtain special instructions before use.

P280

Wear protective clothing (gloves, eye or face protection)

P301+ P312

IF SWALLOWED: call poison center or doctor if you feel unwell

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.

P308 + P313

IF exposed or concerned: Get medical advice/attention.

Supplemental Hazard Statements

None

Restricted to professional users.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

Xi

Irritant



R-phrases)

R22

Harmful if swallowed

R36/38

Irritating to eyes; irritating to skin.

S-phrases)

S53

Avoid exposure - obtain special instructions before use.

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Restricted to professional users.

## 2.3 Other hazards:

None

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

## 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:

Powder solution with inorganic and organic components.

Product name: Atlas ClearSight Tablets with TAE

### 3.2 Components

Name	CAS No.	EC No.	Proportion %	Classification according to 67/548/EEC and 1999/45 / EC	Classification according to regulation (EC)No1272/2008
Atlas ClearSight DNA Stain *	-	-	<1%	-	-
Agarose	9012-36-6	232-731-8	65%	-	-
Tris Acetate EDTA (TAE) buffer	-	-	35%		
<i>Tris (hydroxymethyl) aminomethane</i>	77-86-1	201-064-4	75-80% of TAE buffer	<i>Xi, R36/38</i>	<i>Skin Irrit. 2; H315; Eye Irrit. 2; H319</i>
<i>Na<sub>2</sub>EDTA x 2H<sub>2</sub>O</i>	6381-92-6	205-358-1	5-6 % of TAE buffer	<i>Xn, R22/38</i>	<i>Acute Tox 4; H302; Eye Irrit. 2; H319</i>
<i>Acetic acid</i>	64-19-7	200-580-7	15-20% of TAE buffer	<i>Xi, R36/38</i>	<i>Skin Irrit. 2; H315; Eye Irrit. 2; H319</i>

\*No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 15.

## **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:**

Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

### **4.3 After skin contact:**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

### **4.4 After eye contact:**



Eye contact: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

### **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. Get medical attention if symptoms occur.

### **4.6 Notes to physician:**

Treat symptomatically.

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

No data available.

## **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:**



Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products:** Carbon oxides.

### **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. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### **6.2 Environmental precautions:**

Should not be released into the environment.

### **6.3 Methods for cleaning up:**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### **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:

Wear personal protective equipment. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust might form. For precautions see section 2.2.

#### 7.1.2 Information on fire and explosion protection:

See section 5.

#### 7.1.3 Handling rules:

Handle in accordance with good industrial hygiene and safety practice.

### **7.2 Storage:**

#### 7.2.1 Technical measures and storage conditions:

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.

7.2.4 Further information on storage conditions:  
Recommended storage temperature 4-30°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 protection:**

Handle with suitable protective gloves. Gloves must be inspected prior to use. 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
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:

Long sleeved 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 formation of dust and aerosols. 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:                              | White, powder in tablet form. |
| b) Odour:  | No data available             |
| c) Odour Threshold:                              | No data available             |
| d) pH:   | Max. pH 8.5 at 25°C           |
| e) Melting point/freezing point:                 | No data available             |
| f) Initial boiling point and boiling range:      | No data available             |
| g) Flash point:                                  | No data available             |
| h) Evaporation rate:                             | No data available             |
| i) Flammability (solid, gas):                    | No data available             |
| j) Upper/lower flammability or explosive limits: | No data available             |
| k) Vapour pressure:                              | No data available             |
| l) 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             |
| q) 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**

None under normal processing.

**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 Incompatible materials**

Strong oxidizing agents

**10.7 Hazardous decomposition products**

Other decomposition products No data available.  
 In the event of fire: see section 5

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

11.1.1 The acute toxicity test

Component	Parameter	Value	Species
Atlas ClearSight DNA stain	LD <sub>50</sub> oral	1000-10000 mg/kg	Kunming mice

Other components: No data available

11.2.2 Corrosive and irritant effects

Skin corrosion/irritation Irritant effect  
 Serious eye damage/eye irritation Irritant effect

11.2.3 Respiratory or skin sensitization No data available

11.2.4 Aspiration hazard No data available



### 11.2.5 Carcinogenicity, mutagenicity and toxicity to reproduction mutagenicity:

Component	Parameter	Value	Cell culture/ Species	Method	Remarks
<i>Atlas ClearSight DNA stain</i>	<i>In vitro</i> bacterial mutation test	0,5-5 mg/plate	Salmonella typhimurium TA97/98/100/102	AMES-test	Non-mutagenic
<i>Atlas ClearSight DNA stain</i>	<i>In vivo</i> micronucleus test	1000-5000 mg/kg	Kunming mice	The mouse bone marrow micronucleus test	Negative
<i>Atlas ClearSight DNA stain</i>	<i>In vitro</i> mammalian chromosomal aberration test	31,2-5000 µg/ml	Chinese hamster ovary line.	<i>in vitro</i> mammalian cell chromosome aberration detection system	Negative

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity:

No toxicological data are available on the components of the product

#### 11.2.6 Additional toxicological information:

No data available

#### 11.3 Practical experience

No data available

#### 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**

<b>12.1 Toxicity</b>	No data available
<b>12.2 Persistence and degradability</b>	No data available No data on biological and abiotic degradation are available for the components of the product
<b>12.3 Bioaccumulative potential</b>	No data available
<b>12.4 Mobility in soil</b>	No data available
<b>12.5 Results of PBT and vPvB assessment</b>	
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	
<b>12.6 Other adverse effects</b>	Harmful to aquatic life
<b>12.7 General remarks:</b>	
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**

<b>14.1 UN number</b>	Not applicable
<b>14.2 UN proper shipping name</b>	Not applicable
In accordance with GGVSEB, ADR / RID, IMDG / GGVSee, ICAO / IATA-DGR	
ADR/RID, GGVSEB	Not dangerous good during shipping
IMDG / GGVSee	Not dangerous good during shipping
ICAO / IATA-DGR	Not dangerous good during shipping
<b>14.3 Transport hazard class(es)</b>	
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 user

No 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):  
Hazardous substance or mixture, see section 2

15.1.4 Hazardous components which must be listed on the label.

15.1.5 Pictograms:



Signal word: Warning to Regulation (EC) No. 1272/2008

H-Statements: Hazardous substance or mixture according to Regulation (EC) No. 1272/2008

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed
Eye Irrit.	Eye irritation
H319	Causes serious eye irritation
Skin Irrit.	Skin irritation
H315	Causes skin irritation
H335	May cause respiratory irritation

Full text of R-phrases referred to under sections 2 and 3

T	Toxic
	Acute Toxicity (category 4)
R22	Harmful if swallowed
R36/38	Irritating to eyes and skin.
Xi	Irritant
Xn	Harmful

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](mailto:info@bioatlas.com)

Bioatlas ltd

Riia 181A Tartu, 51014 Estonia  
Phone: +372 5562 4867  
Contact person: Liane Viru  
e-mail: [liane.viru@bioatlast.com](mailto: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.hbcnetbase.com>.

### **16.6 Amended information and reasons for amendment:**

Version number:

Version1: 04.10.2018

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**