

# Atlas TBE Buffer Tablets

## Safety Data Sheet

Bioatlas Ltd

info@bioatlas.com

Previous version 1: 31.07.2019

Posted Date: 14.08.2019

Revision Date:

Print Date: 16.08.2019

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 TBE Buffer Tablets
Product Number:	BA50301
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 Eye irritation (Category 2)  
 H360FD Reproductive toxicity (Category 1B)  
 Specific target organ toxicity - single exposure (Category 3),  
 H335 Respiratory system

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

T Toxic R60, R61  
 Xi Irritant R36/37/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

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

Label elements, Labelling

Pictogram



Danger

Signal word

Hazard statement(s)

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.  
 H360FD May damage fertility. May damage the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.  
 P261 Avoid breathing dust.  
 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) T Toxic



R-phrases)

R60 May impair fertility.  
 R61 May cause harm to the unborn child.  
 R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrases(s)

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

### 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
<i>Tris (hydroxymethyl) aminomethane</i>	77-86-1	201-064-4	32.32 %	<i>Xi, R36/37/38</i>	<i>Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335</i>
<i>Ethylenediaminetetraacetic acid (EDTA)</i>	60-00-4	200-449-4	4.37%	-	<u>H332-H373</u>
<i>Boric acid</i>	10043-35-3	233-139-2	63.31%	T, Repr.Cat.2, R60 - R61	Repr. 1B; H360FD

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

\*\* Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration Boric acid- Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. (REACH) 1907/2006

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## 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, immediately wash off with soap and rinse 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. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. 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:**

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:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust might be formed. 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:

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.

### 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.



##### 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 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 20 °C, in water:	8.3 ± 0.2
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**

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 Incompatible materials

Strong oxidizing agents

## 10.7 Hazardous decomposition products

Other decomposition products

In the event of fire: see section 5

No data available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### 11.1.1 The acute toxicity test

Component	Parameter	Value	Species
Tris (hydroxymethyl)aminomethane:	LD <sub>50</sub> oral	5900 mg/kg	Rat
Boric acid	LD <sub>50</sub> oral	2000 mg/kg	Rat
Boric acid	LD <sub>50</sub> dermal	0.16 mg/L	Rabbit
Boric acid	LD <sub>50</sub> inhalation	0.16 mg/L	Rat

#### 11.2.2 Corrosive and irritant effects

Skin corrosion/irritation

Serious eye damage/eye irritation

After inhalation

Irritant effect

Irritant effect

Slight irritations

#### 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:

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:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Product is suspected to cause damage to fertility. · CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Repr. 1A



To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence (Boric acid)

**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**

**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

**12.3 Bioaccumulative potential** No data available

**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** WGK: 1

**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**

<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
<b>14.4 Packaging group</b>	
ADR/RID, IMDG, IATA	None
<b>14.5 Environmental hazards</b>	
ADR/RID, IMDG, IATA	None
<b>14.6 Special precautions for user</b>	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: Danger 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.

Eye Irrit.	Eye irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

H360FD	May damage fertility. May damage the unborn child
Repr.	Reproductive toxicity
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure
Full text of R-phrases referred to under sections 2 and 3	
T	Toxic
R36/37/38	Irritating to eyes, respiratory system and skin.
R60	May impair fertility.
R61	May cause harm to the unborn child.
Xi	Irritant
Repr.Cat.2	Toxic to Reproduction Category 2

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: 31.07.2019

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**