**Revision and date:** 1 / 2020-10-22

# 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

# **1.1 Product identifier**

Product name:	Bio-Eco®
Is valid for:	Bio-Eco® modified cellulose This material safety data sheet is relevant for all concentrations and product versions.

# **1.2** Relevant identified uses of the substance or mixture

Use of the mixture: impregnation of natural fibre materials to withstand microorganisms, like black mould, algae, fungus and rot. But also, impregnation of natural fibre materials to withstand fire attacks.

# **1.3** Details of the supplier of the safety data sheet

Company name:	Biomimetic Technology Ltd, CN: 06861757	
	Registered at Companies House in England	
Address:	St James House, 13 Kensington Square	
Zip code:	London W8 5HD	
Country:	United Kingdom	
Phone:	+44 (0) 207 795 8100	
E-mail:	info@trulstech.com	
Website:	www.trulstech.com	
Address: Zip code: Country: Phone: E-mail:	Registered at Companies House in England St James House, 13 Kensington Square London W8 5HD United Kingdom +44 (0) 207 795 8100 info@trulstech.com	

# **1.4** Emergency telephone number

# 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

 $\underline{No\ hazards}$  have been classified according to ECHA/REACH pesticide register Regulation (EC) No. 1272/2008.

The chemical substances are <u>not classified</u> as dangerous according to Directive 67/548/EEC.

# 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

#### 2.3 Other hazards

None

#### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

The specific chemical identity of Bio-Eco® is withheld as a trade secret. The chemical composition of Bio-Eco® modified cellulose - developed by recycled forest waste - includes known chemical compounds, in quantities and concentrations, classified for use in food production.

# **4. FIRST AID MEASURES**

#### 4.1 Description of first aid measures

Inhalation:	If breathed in, move person into fresh air
Skin contact:	Wash with soap and water
Eye contact:	Rinse carefully with water. Seek medical advice if troubles remain.
Ingestion:	Give a few glasses of milk or water if the person is fully conscious. Rinse mouth with water.

#### **4.2 Most important symptoms and effects, both acute and delayed** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

# 4.3 Indication of any immediate medical attention and special treatment needed => No data known.

## **5. FIRE FIGHTING MEASURES**

#### 5.1 Extinguishing media

Suitable extinguishing media: Bio-Eco® withstand fire attacks. Still, in case the Bio-Eco® treated natural fibre material goes on fire it's recommended to use water spray, alcohol-resistant foam, dry chemical or carbon dioxide extinguisher.

**5.2 Special hazards arising from the substance or mixture** Carboxylates, Carbon dioxide.

## 5.3 Advice for fire-fighters

Wear self-contained breathing apparatus for fire fighting, if necessary.

## **6. ACCIDENTAL RELEASE MEASURES**

# 6.1 Personal precautions, protective equipment and emergency procedures

If known sensitive skin problems, avoid contact with skin and eyes.

6.2 Environmental precautions

None

#### 6.3 Methods and materials for containment and cleaning up

Clean-up by flushing water into drains.

Keep high concentrated bulk volumes (MT) in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

Information on safe handling, see section 7. Information on personal protective equipment, see section 8. For disposal information, see section 13.

# 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Opened package might be influenced by air moisture and is recommended being handled according to technical specifications. As a fire fighter, provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire.

## 7.2 Conditions for safe storage, including any incompatibilities

Store inaccessible for children. If possible, store in a cool place to avoid evaporation to occur. Keep container tightly closed.

#### 7.3 Specific end use(s)

None.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components with workplace control parameters: None

## 8.2 Exposure controls

Appropriate engineering controls: General industrial hygiene practice.

#### 8.3 Personal protective equipment

Respiratory protection:	None
Eye/face protection:	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hand protection:	Handle with gloves in case of sensitive skin.
Skin protection:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration, and the amount of dangerous substance at specific workplaces.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Appearance:	Liquid – transparent to slightly milky
Odour:	almost none
pH in solution:	6 - 10
Boiling point:	+100°C
Flash point:	N/A
Flammability:	Non-flammable
Relative Density:	~1.2-1.4
Solubility:	cellulose (polysaccharide) is not soluble in water, but soluble in inorganic alkalis.
Decomposition point:	>250 °C

#### 9.2 Other information

No other information.

#### **10. STABILITY AND REACTIVITY**

#### 10.1 Reactivity

The product is stable under the recommended storage and handling conditions.

# 10.2 Chemical stability

The product is stable under the recommended storage and handling conditions.

#### 10.3 Possibility of hazardous reactions

no data known

#### **10.4** Conditions to avoid

no data known

#### **10.5** Incompatible materials

Strong in-organic oxidizing agents, Strong in-organic acids

#### **10.6 Hazardous decomposition products**

no data known

## **11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

Toxicological information on the mixture as a whole:

Acute toxicity:	no data known
Irritation:	no data known
Carcinogenicity:	No component of this product present at levels greater than, or equal to 0.1%, is identified as probable, possible or confirmed human carcinogen.
Raw material:	Cellulose developed by recycling of forest waste, modified by food grade chemical additives in quantities and concentrations like in grapes, fruits respectively bread.
	No hazards have been classified, according to ECHA/REACH pesticide.

## **12. ECOLOGICAL INFORMATION**

- 12.1 Toxicity
  - no data known
- 12.2 Persistence and degradability no data known
- 12.3 Bio-accumulative potential no data known
- 12.4 Mobility in soil no data known
- 12.5 Results of PBT and vPvB assessment no data known
- 12.6 Other adverse effects no data known

# **13. DISPOSAL CONSIDERATIONS**

## **13.1** Waste treatment methods

Product: Offer surplus to become recyclable solutions for biofuel /pellets/. Contaminated packaging: Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

14.1 UN number

ADR/RID:-IMDG:-IATA:-

- 14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
   14.3 Transport hazard class(es)
- 14.3
  Iransport hazard class(es)

  ADR/RID: 

  IMDG: 

  IATA:
- 14.4 Packaging group ADR/RID:-IMDG:-IATA:-

14.5	Environmental hazards	Environmental hazards	
	ADR/RID:	no	
	IMDG Marine pollutant:	no	
	IATA:	no	

14.6Special precautions for user<br/>none

## **15. REGULATORY INFORMATION**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data known
- 15.2 Chemical Safety Assessment

no data known

## **16. OTHER INFORMATION**

The above information is in accordance with the above laws and is based on knowledge and experience at the time of issue. It is the user's responsibility to use this product in a safe manner and comply with all applicable laws and regulations regarding use of the product. The user should be aware that the use of the product for purposes other than those for which it is produced – for industrial & household cleaning, respectively impregnation of natural fibre materials – might be a potential risk.

List of relevant hazard statements: None