

## SAFETY DATA SHEET (SDS)

SDS DATE : Apr, 2026

### Section 1. Product And Company Identification

1. **Product identifier**
  - 1.1. Product Name : OxiTec™ TBARS Assay Kit
  - 1.2. Product Code : BO-TBR-200
2. **Details of the supplier of the safety data sheet**
  - 2.1. Company: BIOMAX, Inc.,
  - 2.2. Address : Keumkang Penterium IX Tower CORE-C 7F, 46, Galmaesunhwan-ro 166beon-gil, Guri-si, Gyeonggi-do, Republic of Korea
  - 2.3. Telephone: +82-2-3296-3158
  - 2.4. Emergency Phone : +82-2-3296-3159
  - 2.5. FAX: +82-2-973-2858
3. **Product use**
  - 3.1. For research use only.

### Section 2. Hazard identification

Component	Description	Volume	Safety Information
Acid Reagent	Proprietary Buffer	20 ml X 3	No hazards
Indicator	Lyophilized	4 vials	No hazards
MDA Standard	Proprietary Buffer	100 µl	See below

#### 1.1 1,1,3,3-Tetraethoxypropane:

##### Emergency Overview

**GHS Classification:** flammable liquid (category 4), acute toxicity, oral (category 4)

GHS Label elements, including precautionary statements

**Pictogram:**



**Signal word:** warning

**Hazard statement(s):** H227 Combustible liquid.  
 H302 Harmful if swallowed.

**Precautionary statement(s):** P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P330 Rinse mouth.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
 P403 + P235 Store in a well-ventilated place. Keep cool.  
 P501 Dispose of contents/ container to an approved waste disposal plant.

##### HMIS Classification

**Health hazard:** 1  
**Flammability:** 2  
**Physical hazards:** 0

##### NFPA Rating

**Health Hazard:** 1  
**Fire:** 2  
**Reactivity Hazard:** 0

##### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

### Section 3. Composition/Information on ingredients

Component	CAS Number	EC-No.	Molecular Weight	Formula
1,1,3,3-Tetraethoxypropane	122-31-6	204-533-1	220.31	C <sub>11</sub> H <sub>24</sub> O <sub>4</sub>

### Section 4. First Aid Measures

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off with soap and plenty of water.

**In case of eye contact:** Flush eyes with water as a precaution.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

### Section 5. Fire-fighting Measures

**Condition of flammability:** Flammable in the presence of a source of ignition when the temperature is above the flash point.

Keep away from heat/sparks/open flame/hot surface. No smoking.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products:** Hazardous decomposition products formed under fire conditions— carbon oxides, nitrogen oxides.

**Further information:** Use water spray to cool unopened containers.

### Section 6. Accidental Release Measures

**Personal precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

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

### Section 7. Handling And Storage

#### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 4°C.

### Section 8: Exposure Controls/Personal Protection

#### 1,1,3,3-Tetraethoxypropane :

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Hand protection

Handle with gloves. Gloves must be inspected prior to use. 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.

##### Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substance, and to the specific work-place.

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Hygiene measures

General industrial hygiene practice

### Section 9: Physical And Chemical Properties

Property	1,1,3,3- Tetraethoxypropane
Appearance:	Clear liquid
pH:	No data available
Water Solubility:	No data available
Other Solubility:	No data available
Boiling Point (°C):	265.0 °C

<b>Melting Point (°C):</b>	- 90 °C
<b>Flash Point (°C):</b>	88 °C
<b>Ignition Temperature (°C):</b>	No data available
<b>Density:</b>	0.919 g/cm <sup>3</sup>

#### Section 10: Stability And Reactivity

Property	1,1,3,3- Tetraethoxypropane
<b>Chemical Stability:</b>	Stable under recommended storage conditions
<b>Conditions to Avoid:</b>	Heat, flames, sparks
<b>Materials to Avoid:</b>	Strong oxidizing agents, Strong acids
<b>Hazardous decomposition products:</b>	No data available

#### Section 11: Toxicological Information

##### 1,1,3,3-Tetraethoxypropane:

**Acute toxicity:** LD50 Oral - Rat - 1,610 mg/kg

Remarks: Behavioral:Muscle contraction or spasticity. Lungs, Thorax, or Respiration:Dyspnea. Cyanosis

**Skin corrosion/irritation:** Skin - Rabbit: Mild skin irritation - 24 h

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** Rat: Morphological transformation.

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

**Specific target organ toxicity – single exposure (GHS):** no data available

**Specific target organ toxicity – repeated exposure (GHS):** no data available

**Aspiration hazard:** no data available

##### **Potential Health Effects**

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects:** no data available

**Additional information:** RTECS: ON8750000

#### Section 12: Ecological Information

**Persistence and degradability:** no data available

**Toxicity:** no data available

**Bioaccumulative potential:** no data available

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:** no data available

#### Section 13: Disposal Considerations

**Product:** Observe all federal, state, and local environmental regulations.

**Contaminated packaging:** Dispose of as unused product.

#### Section 14: Transport Information

##### 1,1,3,3-Tetraethoxypropane:

**DOT (US) :** NA-Number: 1993 Class: NONE Packing group: III

Proper shipping name: Combustible liquid, n.o.s. (1,1,3,3-Tetraethoxypropane)

Poison Inhalation Hazard: No

**IMDG:** Not dangerous goods.

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**Section 15: Regulatory Information**

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1. **Regulation under the Occupational Safety and Health Act**
  - 1.1 Harmful Substances Required Permission for Manufacture - Not relevant
  - 1.2 Harmful Substances Prohibited from Manufacturing - Not relevant
  - 1.3 Carcinogenic Substances - Not relevant
  - 1.4 Controlled Substances Subject to Environment Monitoring - Not relevant
  - 1.5 Controlled Substances Subject to Health Examination - Not relevant
  - 1.6 Hazardous substances requiring management - Not relevant
2. **Act on the Registration and Evaluation, etc. of Chemical Substances, Chemicals Control Act**
  - 2.1 Toxic Chemicals - Not relevant
  - 2.2 Observational chemicals - Not relevant
  - 2.3 Restricted Chemicals - Not relevant
  - 2.4 Prohibited Chemicals - Not relevant
  - 2.5 Accident Precaution Chemicals - Not relevant
3. **Dangerous Substances Safety Management Act**
  - 3.1 Not relevant
4. **Wastes Control Act**
  - 4.1 Follow article 13 of the act to dispose the product waste
5. **Other regulations**

KECI Number  
Not in compliance with the inventory

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**Section 16: Other information**

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**OTHER INFORMATION:****PREPARATION INFORMATION:****DISCLAIMER:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.

It does not represent any guarantee of the properties of the product. BIOMAX, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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