

## SAFETY DATA SHEET (SDS)

SDS DATE : Oct, 2021

### Section 1. Product And Company Identification

1. **Product identifier**
  - 1.1. Product Name : Smart-Buffer™ Tensile Gel Preparing Solution
  - 1.2. Product Code : BWG-0001
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
Smart-Buffer™ Tensile Gel Preparing Solution	Liquid	0.75 mL	See below

- 1.1 **Glycerol:**
- Emergency Overview**  
**OSHA Hazards:** Target Organ Effect  
**Target Organs:** Kidney  
**GHS Classification:** Skin irritation (Category 3)  
 Eye irritation (Category 2B)
- GHS Label elements, including precautionary statements**  
**Pictogram:** none  
**Signal word:** none  
**Hazard statement(s):** none  
**Precautionary statement(s):** P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- HMIS Classification**  
**Health hazard:** 1  
**Chronic Health Hazard:** \*  
**Flammability:** 1  
**Physical hazards:** 0
- NFPA Rating**  
**Health Hazard:** 1  
**Fire:** 1  
**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
Glycerol	56-81-5	200-289-5	92.09	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>

### Section 4. First Aid Measures

**Glycerol:****General advice:** Move out of dangerous area.**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.**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****Glycerol:****Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.**Special hazards arising from the substance or mixture :** Carbon oxides**Advice for firefighters :** Wear self-contained breathing apparatus for firefighting if necessary.**Further information :** No data available**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**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for safe storage**

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

Recommended storage temperature: RT

**Section 8: Exposure Controls/Personal Protection****Glycerol:****Appropriate engineering controls**

General industrial hygiene practice.

**Personal protective equipment****Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges.

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**

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

**Hygiene measures**

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

**Section 9: Physical And Chemical Properties**

Property	Glycerol
<b>Appearance:</b>	Clear liquid
<b>pH:</b>	5.5-8
<b>Water Solubility:</b>	Soluble
<b>Other Solubility:</b>	No data available
<b>Boiling Point (°C):</b>	182 °C (360 °F)
<b>Melting Point (°C):</b>	20 °C (68 °F)
<b>Flash Point (°C):</b>	160 °C (320 °F)
<b>Ignition Temperature (°C):</b>	370 °C (698 °F)
<b>Density:</b>	1.25 g/ml

**Section 10: Stability And Reactivity**

Property	Glycerol
<b>Chemical Stability:</b>	Stable under recommended storage conditions

<b>Conditions to Avoid:</b>	No data available
<b>Materials to Avoid:</b>	Strong bases, strong oxidizing agents
<b>Hazardous decomposition: products:</b>	Carbon oxides

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## Section 11: Toxicological Information

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### Glycerol:

**Acute toxicity:** LD50 Dermal – rabbit – >10,000 mg/kg

**Irritation and corrosion:** no data available

**Sensitization:** no data available

**Germ cell mutagenicity:** no data available

### **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.

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

### **Potential Health Effects**

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

**Skin:** Harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** 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: MA8050000

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## Section 12: Ecological Information

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### Glycerol:

**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

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## Section 13: Disposal Considerations

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**Product:** Observe all federal, state, and local environmental regulations. Contact licensed professional waste disposal service to dispose of this material.

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

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## Section 14: Transport Information

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### Glycerol:

**DOT (US):** Not dangerous goods.

**IMDG:** Not dangerous goods.

**IATA:** 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

**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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