

SAFETY DATA SHEET (SDS)

SDS DATE : Oct, 2021

Section 1. Product And Company Identification

1. **Product identifier**
 - 1.1. Product Name : 1Kb Easy-iSee™ DNA Size Marker
 - 1.2. Product Code : SDM181-P
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
1Kb Easy-iSee™ DNA Size Marker	Liquid (In Glycerol)	500 μ l	No hazards

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	$C_3H_8O_3$

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: -20 °C

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

Section 10: Stability And Reactivity

Property	Glycerol
Chemical Stability:	Stable under recommended storage conditions

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

Section 11: Toxicological Information

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

Section 12: Ecological Information

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

Section 13: Disposal Considerations

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.

Section 14: Transport Information

Glycerol:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

Section 15: Regulatory Information

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

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.

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