# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

078951282

N/A



KeraVet® Gel

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

# 1. PRODUCT IDENTIFICATION

KeraVet® Gel 1.1 TRADE NAME (AS LABELED): Not available SYNONYMS: CAS#: Mixture

1.2 PRODUCT USE: Water-based wound dressing hydrogel

1.3 MANUFACTURER'S NAME: KeraVet Bio, Inc.

200 E 1st Street, Suite 102, Winston-Salem, NC 27101 ADDRESS:

**BUSINESS PHONE:** 336-725-0621

EMAIL: info.keravet@keravetbio.com

WEBSITE ADDRESS: keranetics.com 1.4 EMERGENCY PHONE NUMBER: 336-202-1307

1.5 PREPARATION INFORMATION:

DATE OF CURRENT REVISION: August 22, 2022

DATE OF LAST REVISION: New

# 2. HAZARD IDENTIFICATION

#### **EMERGENCY OVERVIEW:**

Product Description: This product is a light brown to brown colored gel with a characteristic odor.

**Health Hazards:** May cause eye irritation upon contact.

Flammability Hazards: This product is a non-flammable mixture with flash point greater than 200°F.

Reactivity Hazards: None known

Environmental Hazards: The Environmental effects of this product have not been investigated. Release of this

product is not expected to have significant adverse effects in the aquatic environment.

US DOT SYMBOLS EUROPEAN and (GHS) Hazard Symbols

Non-Regulated Material None applicable Signal Word: Warning

# 2.1 CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 or the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

#### **EU HAZARD CLASSIFICATION OF INGREDIENTS:**

#### **Index Number:**

EC# 231-791-2 This substance is not classified in the Annex V

EC# 204-589-7 Annex VI Index #: 603-098-00-9

Substances not listed either individually or in group entries must be self classified.

#### Component(s) Contributing to Classification(s)

All Components

#### **2.2 LABEL ELEMENTS:**

# **GHS Hazard Classification(s):**

Eye Irritant Category 2B

### **Hazard Statement(s):**

H320: Causes eye irritation

#### **Prevention Statement(s):**

P264: Wash thoroughly after handling

### Response 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

P337+P313: If eye irritation persists: Get medical advice/attention.

# Storage Statement(s):

None applicable

#### **Disposal Statement(s):**

None applicable

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#### 2.3 HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of exposure for this product are by eye contact.

ACUTE:

**INHALATION:** None anticipated under normal conditions.

**CONTACT WITH SKIN:** None anticipated under normal conditions.

**EYE CONTACT:** Contact may cause irritation to the eyes, resulting in redness or watering.

**INGESTION:** Not anticipated to be a normal route of entry under normal conditions.

**CHRONIC**: None known

TARGET ORGANS: Acute: Eyes Chronic: None Known

# 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS#	GHS Hazard Classification	
Human Hair Keratin	3-7%	Not Assigned	Not Listed in ESIS	H320 Eye Irrit Cat 2B	
Purified Water	90-97%	7732-18-5	231-791-2	Not Classified	
Denatonium Benzoate	0.1-2%	3734-33-6	223-095-2	H302 Acute Tox Cat 4 (Oral), H332 Acute Tox Cat 4 (Inhal), H318 Eye Dam Cat 1	
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

# 4. FIRST-AID MEASURES

#### 4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation and/or blurred vision occurs.

SKIN CONTACT: If product irritates skin, wash skin thoroughly with soap and water after handling. Seek medical attention if irritation persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed and the victim feels unwell, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known

# 4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Exposure to this product may cause irritation the eyes.

4.3 RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

#### 5. FIRE-FIGHTING MEASURES

# **5.1 FIRE EXTINGUISHING MATERIALS:**

Use fire extinguishing methods below:

Carbon Dioxide: Yes Water Spray: Yes Dry Chemical: Yes Foam: Yes Other: Any "C" Class Halon: Yes

# **5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:**

None known

Explosion Sensitivity to Mechanical Impact: No Explosion Sensitivity to Static Discharge: No

# **5.3 SPECIAL FIRE-FIGHTING PROCEDURES:**

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

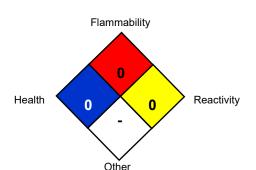
NFPA RATING SYSTEM

**HMIS RATING SYSTEM** 

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

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KeraVet® Gel **HEALTH HAZARD (BLUE)** 0 FLAMMABILITY HAZARD (RED) 0 0 PHYSICAL HAZARD (YELLOW) PROTECTIVE EQUIPMENT **EYES** RESPIRATORY **BODY** See Sect See Sect 8 8 For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

# 6. ACCIDENTAL RELEASE MEASURES

# 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

See section 8.2 for Exposure Controls.

### **6.2 ENVIRONMENTAL PRECAUTIONS:**

Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

# **6.3 SPILL AND LEAK RESPONSE:**

Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13. Disposal Considerations).

# 7. HANDLING and STORAGE

#### 7.1 PRECAUTIONS FOR SAFE HANDLING:

To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing mists. Use good industrial hygiene practices.

# 7.2 STORAGE AND HANDLING PRACTICES:

Keep in cool (15°C-30°C), dry, well-ventilated area in closed containers when not in use. Protect containers from physical damage. Protect from extreme temperatures. Keep this and other chemicals out of the reach of children.

#### 7.3 SPECIFIC USES:

KeraVet Gel is a water-based wound dressing hydrogel formulated for the management of superficial to partial thickness dermal wounds.

# 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

#### **8.1 EXPOSURE PARAMETERS:**

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Purified Water	7732-18-5	Not Listed	Not Listed
Human Hair Keratin	Not Assigned	Not Listed	Not Listed
Denatonium Benzoate	3734-33-6	Not Listed	Not Listed

# **8.2 EXPOSURE CONTROLS:**

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not normally required when using this product. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

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**EYE PROTECTION** Safety glasses or goggles are recommended where splashing or eye contact is possible. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

**HAND PROTECTION:** Chemical resistant gloves are recommended to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**BODY PROTECTION:** Use body protection as appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

# 9. PHYSICAL and CHEMICAL PROPERTIES

# 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is a light brown to brown colored gel

**ODOR:** Characteristic odor

**ODOR THRESHOLD:** Not Available

**pH:** 5.5-7.5

MELTING/FREEZING POINT: <32 °F

**BOILING POINT:** >212 °F **FLASH POINT:** >200 °F

**EVAPORATION RATE (n-BuAc=1):** Not Available **FLAMMABILITY (SOLID, GAS):** Not Applicable

**UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS:** Not Applicable

VAPOR PRESSURE (mm Hg @ 20°C (68°F): Not Available

VAPOR DENSITY: Not Available RELATIVE DENSITY: Not Applicable

**DENSITY: Not Available** 

SPECIFIC GRAVITY: Not Available SOLUBILITY IN WATER: Soluble WEIGHT PER GALLON: Not Available

PARTITION COEFFICENT (n-octanol/water): Not Applicable

**AUTO-IGNITION TEMPERATURE:** Not Applicable **DECOMPOSITION TEMPERATURE:** Not Available

VISCOSITY: Not Available VOC g/l / Lb/gal: 0 9.2 OTHER INFORMATION:

No additional information available.

# 10. STABILITY and REACTIVITY

#### 10.1 REACTIVITY:

This product is not reactive.

# 10.2 STABILITY:

Stable under conditions of normal storage and use. Store product at 15 °C -- 30 °C.

# 10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Will not occur.

#### 10.4 CONDITIONS TO AVOID:

None known.

# 10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:

None known.

#### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

None anticipated.

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# 11. TOXICOLOGICAL INFORMATION

#### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

#### **TOXICITY DATA:**

No LD 50 data available for this product or its components.

**SUSPECTED CANCER AGENT:** None of the ingredients within this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, or suspected to be, cancer-causing agents by these agencies.

**IRRITANCY OF PRODUCT:** This product may be irritating to the eyes.

SENSITIZATION TO THE PRODUCT: This product is not considered a respiratory system or skin sensitizer.

**REPRODUCTIVE TOXICITY INFORMATION:** No information concerning the effects of this product and its components on the human reproductive system.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: None known SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: None known ASPIRATION HAZARD: This product is not considered an aspiration hazard.

# 12. ECOLOGICAL INFORMATION

#### 12.1 TOXICITY:

No toxicity data available.

#### 12.2 PERSISTENCE AND DEGRADABILITY:

No specific data available on this product.

# **12.3 BIOACCUMULATIVE POTENTIAL:**

No specific data available on this product.

# 12.4 MOBILITY IN SOIL:

No specific data available on this product.

# 12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

No specific data available on this product.

### 12.6 OTHER ADVERSE EFFECTS:

No specific data available on this product.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

#### 12.7 WATER ENDANGERMENT CLASS:

Not expected to be water endangering in accordance with EU Guideline 91/155-EWG.

# 13. DISPOSAL CONSIDERATIONS

#### **13.1 WASTE TREATMENT METHODS:**

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

#### 13.2 EU Waste Code:

Not determined.

### 14. TRANSPORTATION INFORMATION

# US DOT, IATA, IMO, ADR:

**U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:** This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

14.1 PROPER SHIPPING NAME: Non-Regulated Material

14.2 HAZARD CLASS NUMBER and DESCRIPTION:None14.3 UN IDENTIFICATION NUMBER:None14.4 PACKING GROUP:None14.5 DOT LABEL(S) REQUIRED:None

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: None

14.6 RQ QUANTITY: None

**14.7 MARINE POLLUTANT:** None of the components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.8 SPECIAL PRECAUTIONS FOR USER: None

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#### 14.9 INTERNATIONAL TRANSPORTION:

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

# 14.10 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND IBC CODE:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

### 15. REGULATORY INFORMATION

#### 15.1 UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4.540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted form listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

#### 15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

# CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Classified per WHMIS 2015.

#### 15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

See Section 2 for Details.

# 15.4 AUSTRALIAN INFORMATION FOR PRODUCT:

The components of this product are listed on the International Chemical Inventory list.

# 15.5 JAPANESE INFORMATION FOR PRODUCT:

#### JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS:

The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

#### JAPANESE ENCS INVENTORY:

The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

#### POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW:

No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

#### **15.6 INTERNATIONAL CHEMICAL INVENTORIES:**

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

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# 16. OTHER INFORMATION

#### **16.1 ABBREVIATIONS AND ACRONYMS:**

ARD: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

PREPARED BY: Chris Eigbrett – (MSDS to GHS Compliance)

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. KeraVet Bio, Inc assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are no adhered to as stipulated in the data sheet. Furthermore, KeraVet Bio, Inc assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

# **END OF SDS SHEET**

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