



## Safety Data Sheet

Revision: 01

Date: March 20, 2017

### SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

#### 1. Product Identifiers

Product Name	Collagenase, Lyophilized
Catalog No	5030
Brand Name	Collagenase
CAS No.	9001-12-1

#### 2. Relevant identified uses of the substance or mixture and uses advised against

Identified Uses	Laboratory chemicals, Manufacturer of substances
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#### 3. Details of the supplier of the safety data sheet

Company	Advanced BioMatrix, Inc. 5930 Sea Lion Place Carlsbad, CA 92010 USA Phone: 1-800-883-8220 1-760-929-0755 outside USA
Fax	1-510-217-3452

#### 4. Emergency telephone number

Emergency Phone No.	1-800-883-8220
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### SECTION 2 – HAZARDS IDENTIFICATION

#### 1. Classification of the substance or mixture

Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Respiratory sensitization (Category 1)  
Skin sensitization (Category 1)  
Specific target organ toxicity - single exposure (Category 3)

#### 2. GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342 + P331	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
<b>3. Hazards not otherwise classified (HNOC) or not covered by GHS – None.</b>	
<b>4. Potential Health Effects</b>	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin, eye, or respiratory irritation upon contact.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
<b>5. Medical conditions Generally Aggravated by Exposure:</b> Allergy-prone and asthmatic individuals should be particularly cautious with enzymes and other materials of biologic origin.	

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

### 1. Substances

CAS No.	9001-12-1
EC No.	3.4.24.3

## SECTION 4 – FIRST AID MEASURES

**1. General advice: Enzymes/Proteins may cause allergic reactions in certain sensitive individuals.**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of contact area.

**2. Eye Contact**

Check for contact lenses and remove if present. Flush thoroughly with water while opening eyelids. If symptoms such as redness and irritation persist, obtain medical attention.

**3. Skin Contact**

Remove contaminated clothing. Wash material from skin with soap and water and rinse thoroughly with clean water. Obtain medical attention as needed or if irritation develops. Clean contaminated clothing before reuse.

**4. Inhalation**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration.

**5. Ingestion**

May be harmful if swallowed. Obtain medical attention as needed.

**6. Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

**7. Indication of any immediate medical attention and special treatment needed**

No data available

## SECTION 5 – FIREFIGHTING MEASURES

**1. Extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**2. Special hazards arising from the substance or mixture**

No data available

**3. Advice for firefighters**

Wear self-contained breathing apparatus for firefight if necessary.

**4. Further Information**

No data available

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**1. Personal precautions, protective equipment and emergency procedures**

Avoid breath vapors, mist or gas.

For personal protection see section 8.

**2. Environmental precautions**

Do not let product enter drains.

**3. Methods and materials for containment and cleaning up**

Wear approved respirator and protective gloves. Vacuum or collect powdered spill into appropriate waste container for disposal. Avoid physical contact and dust during removal. Use normal clean-up procedures for liquid spillage and wash thoroughly with water. Wash contaminated clothing before reuse.

**4. Reference to other sections**

For disposal see section 13.

## **SECTION 7 – HANDLING AND STORAGE**

**1. Precautions for safe handling**

Provide appropriate exhaust ventilation. Minimize dust and/or aerosol generation during use. Dry powders can build static electricity caused by excessive handling.

Wear appropriate protective equipment as per Section 8.

For precaution see section 2.2

**2. Conditions for safe storage, including any incompatibilities**

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

Refer to specific product label for storage conditions. Lyophilized proteins will absorb moisture under high humidity and/or moisture conditions. Keep containers tightly closed when not in use and store in a cool, dry area according to label conditions. Longterm storage temperatures should not exceed 25°C for maximum stability.

**3. Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## **SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

**1. Workplace control parameters**

Contains no substances with occupational exposure limit values.

**2. Exposure controls**

**Appropriate engineering controls**

Exhaust Vent Fan.

**Personal protective equipment**

**Eye/Face protection**

Either safety glasses or goggles should be worn.

**Skin and body protection**

Wear gloves and labcoat to prevent skin contact. Use proper glove removal technique (without touching their outer surface) to avoid skin contact with these products. Dispose of contaminated gloves after use in accordance with applicable

laws and good laboratory practices. Wash and dry hands.

**Respiratory protection**

A protective dust mask or approved respirator is advisable to avoid breathing particulates when a powdered form of the product is being handled.

**Other Protective Clothing or Equipment**

Sensitive individuals should wear dust masks/respirators, protective gloves, eye protection, lab coat, apron or other protective clothing to minimize contact.

**Control of environmental exposure**

Do not let product enter drains.

<b>SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES</b>
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Appearance	
Form	Powder
Color	White to tan
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability	No data available
Upper/lower flammability	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n- octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

<b>SECTION 10 – STABILITY AND REACTIVITY</b>
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Reactivity	No data available
Chemical stability	Stable under recommend storage conditions
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available

Incompatible material  
Hazardous decomposition products

No data available  
Hazardous decomposition  
products formed under fire  
conditions. - Nature of  
decomposition products not  
known.

**\*\*In the event of fire: see section 5.\*\***

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

Acute toxicity	No data available
Inhalation	No data available
Dermal	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	May cause allergic respiratory and skin reactions.
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
Specific target organ toxicity	
Single exposure	May cause respiratory irritation.
Repeated exposure	May cause allergic reactions.
Aspiration hazard	No data available
Additional information	
RTECS	No data available

**\*\*To the best of our knowledge, the chemical, physical and toxicological properties have not  
been thoroughly investigated.\*\***

## SECTION 12 – ECOLOGICAL INFORMATION

Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effect	No data available

## SECTION 13 – DISPOSAL CONSIDERATIONS

### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

### **Contaminated packaging**

Dispose of as unused product.

## SECTION 14 – TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

## SECTION 15 – REGULATORY INFORMATION

SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	Acute Health Hazard
Massachusetts Right To Know Components	No components are subject to Massachusetts Right To Know Act.
Pennsylvania Right To Know Components	No components are subject to Pennsylvania Right To Know Act.

New Jersey Right To Know Components

California Prop. 65 Components

No components are subject to Pennsylvania Right To Know Act. This product does not contain any chemicals known to State of California to cause cancer birth defects, or any other reproductive harm.

## SECTION 16 – OTHER INFORMATION

### HMIS Rating

Health hazard

3

Chronic Health Hazard

Unknown, allergic reactions may develop in certain sensitive individuals.

Flammability

0

Physical Hazard

0

### NFPA Rating

Health hazard

3

Fire Hazard

0

Reactivity Hazard

0

### Further information:

This information has been prepared by Advanced BioMatrix, Inc. 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. Advanced BioMatrix, Inc. and its Affiliates shall not be held liable for any damages resulting from handling or from contact with the above product. See [www.advancedbiomatrix.com](http://www.advancedbiomatrix.com) for additional terms and conditions of sale.

### Preparation Information:

Advanced BioMatrix, Inc.

1-800-883-8220