

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)
Classification according to Regulation (EC) No. 1272/2008

2. GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

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H317

H319

H334

H335

Precautionary statement(s)

P261

P280

P305 + P351 + P338

P342 + P331

May cause an allergic skin reaction.

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

Avoid breathing

dust/fume/gas/mist/vapors/spray.

Wear protective gloves/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

3. Hazards not otherwise classified (HNOC) or not covered by GHS – None.

4. Potential Health Effects

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.

5. Medical conditions Generally Aggravated by Exposure: 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

Classification according to Regulation (EC) No. 1272/2008

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.

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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

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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.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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

SECTION 10 – STABILITY AND REACTIVITY

Reactivity

No data available

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Chemical stability

Possibility of hazardous reactions
Conditions to avoid
Incompatible material
Hazardous decomposition products

Stable under recommend storage conditions
No data available
No data available
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.

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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

ADR

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

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SARA 311/312 Hazards
Massachusetts Right To Know Components

Pennsylvania Right To Know Components

New Jersey Right To Know Components

California Prop. 65 Components

levels established by SARA Title III, Section 313.

Acute Health Hazard

No components are subject to Massachusetts Right To Know Act.

No components are subject to Pennsylvania Right To Know Act.

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 for additional terms and conditions of sale.

Preparation Information:

Advanced BioMatrix, Inc.

1-800-883-8220