

Date of Issue: August 18, 2023

Revision Date: N/A
Version Number: 1.0

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Form: Mixture

Product Name: Collagenase Type 2 **Product Code:** MB-123-0050

1.2 Intended Use of the Product

For research use only

1.3 Name, Address, and telephone of the Responsible Party

Company:

Rockland Immunochemicals, Inc.

321 Jones Boulevard Pottstown, PA 19464 (800) 656-7625

1.4 Emergency Telephone Number

<u>CHEMTREC</u>: 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS-US Classification:

Respiratory sensitization (Category 1), H334

2.2 Label Elements

GHS-US Labeling:

Hazard Pictogram:



<u>Signal Word</u>: Warning Hazard Statements:

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P280: Wear protective gloves.

P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

2.3 Other Hazards

No data available

2.4 Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



3.1 Substance

Not applicable

3.2 Mixture

Name	Product Identifier	%	GHS-US classification*
collagenase	(CAS No) 9001-12-1	<=100	Resp. Sens. 1; H334

^{*}Full text of GHS-US phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

<u>General</u>: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

<u>After Inhalation</u>: When symptoms occur, go into open air, and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

After Skin Contact: Immediately remove any contaminated clothing.

<u>After Eye Contact</u>: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

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

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

<u>Suitable Extinguishing Media:</u> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable Extinguishing Media: For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special Hazards Arising from the Substance or Mixture

Fire Hazard: Not flammable or combustible.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Advice for Firefighters

<u>Precautionary Measures - Fire</u>: Exercise caution when fighting any chemical fire. Under fire conditions closed containers may rupture or explode.

<u>Firefighting Instructions</u>: Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition. <u>Protection During Firefighting</u>: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Normal ventilation is adequate.

6.1.1 For Non-emergency Personnel



Protective Equipment: Use appropriate personal protection equipment (PPE).

6.1.2 For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

<u>Emergency Procedures</u>: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental Precautions

Do not let product enter drains.

6.3 Methods and Material for Containment and Cleaning Up

<u>For Containment</u>: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4 Reference to Other Sections

See Heading 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Additional Hazards When Processed: None

<u>Precautions for Safe Handling</u>: For precautions see section 2.2. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

<u>Technical Measures</u>: Comply with applicable regulations.

<u>Storage Conditions</u>: Store vial at 2 - 8 ° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use.

Incompatible Products: N/A

7.3 Specific End Use(s)

For research use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Contains no substances with occupational exposure limit

8.2 Exposure Controls

<u>Appropriate Engineering Controls</u>: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

<u>Personal Protective Equipment</u>: The use of personal protective equipment may be necessary as conditions warrant. Gloves. Protective clothing. Protective goggles.





<u>Materials for Protective Clothing</u>: Wear appropriate protective gloves and clothing to prevent skin exposure.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Safety glasses with side shields or safety goggles.

<u>Skin and Body Protection</u>: Wear gloves and lab coat 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.

<u>Respiratory Protection</u>: A protective dust mask or approved respirator is advisable to avoid breathing particulates when a powdered form of the product is being handled.

Environmental Exposure Controls: No special environmental precautions required.

Other Information: When using, do not eat, drink, or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

<u>Physical State</u>: Lyophilized <u>Appearance</u>: White to tan Odor: No data available

Odor Threshold: No data available

pH: No data available

Evaporation Rate: No data available Melting Point: No data available Freezing Point: No data available Boiling Point: No data available Flash Point: No data available

<u>Auto-ignition Temperature</u>: No data available Decomposition Temperature: No data available

Flammability (solid, gas): Not flammable Lower Flammable Limit: No data available Upper Flammable Limit: No data available

Vapor Pressure: No data available

Relative Vapor Density at 20°C: No data available

Relative Density: No data available Specific Gravity: No data available Solubility: Appreciable in water

Partition Coefficient: N-Octanol/Water: No data available

Viscosity: No data available

9.2 Other Information

No additional information available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None known.

10.2 Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3 Possibility of Hazardous Reactions

No information available.



10.4 Conditions to Avoid

No information available.

10.5 Incompatible Materials

No information available.

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In the event of fire: see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

NTP: No ingredient 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 on OSHA's list of regulated carcinogens.

Acute toxicity:

collagenase (9001-12-1)		
LD50 Oral	No Data Available	
LD50 Dermal	No Data Available	
LC50 Inhalation	No Data Available	

Chronic Toxicity Irritation: No information available.

Sensitization: No information available.

<u>Carcinogenicity:</u> IARC/ACGIH/ NTP/OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

<u>Mutagenic effects:</u> No information available. <u>Reproductive effects</u>: No information available. <u>Developmental effects</u>: No information available.

Teratogenicity: No information available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and Degradability

No data available.

12.3 Bioaccumulative Potential

No data available.

12.4 Mobility in Soil

No data available.

12.5 Other Adverse Effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods



<u>Waste Disposal Recommendations</u>: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: None.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored and can vary based on several variables that may or may not have been known at the time the SDS was issued.

14.1 In Accordance with DOT

Not dangerous goods

14.2 In Accordance with IMDG

Not dangerous goods.

14.3 In Accordance with IATA

Not dangerous goods

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Material(s) listed are exempt from the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory when supplied for research and development purposes or used under the supervision of a technically qualified individual as defined by 40CFR720.3. The health risks have not been fully determined.

15.2 US State Regulations

Based upon available information, material(s) listed are not known to be regulated by any state or listed on the New Jersey Right To Know Hazardous Substance List.

California Prop. 65 Components: 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, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 08/18/2023

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Full text of GHS-US phrases

Resp. Sens. 1	Respiratory sensitization (Category 1)	
H334	May cause allergy or asthma symptoms or breathing difficulties if	
	inhaled.	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.