

Safety Data Sheet

Gelatin Methacrylate

Date: June 16, 2022

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifiers:

Product Name: Gelatin Methacrylate (GelMA)

Catalog Number: VL3500000502, #5208-1GM, D16110025360, D16110025361

2. Recommended use and restrictions on use.

This product is for R&D use only and is not intended for human or other uses.

3. Details of the supplier of the safety data sheet

Manufacturer's Name: Advanced BioMatrix

Address: 5930 Sea Lion Place, Carlsbad, CA, 92010

Phone: 1-800-883-8220

4. Emergency telephone number:

Emergency telephone number: 1-800-883-8220

SECTION 2 - HAZARDS IDENTIFICATION

1. Classification of the substance or mixture:

Not a hazardous substance or mixture.

2. GHS Label elements, including precautionary statements:

Not a hazardous substance or mixture.

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

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

1. Chemical Name: Gelatin Methacrylate

2. Common name and synonyms: Methacrylated Gelatin, or GelMA

SECTION 4 - FIRST AID MEASURES

- 1. If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- 2. In case of skin Contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.
- 3. In case of eye contact:** Flush eyes with large amount of water for at least 15 minutes and consult a physician.
- 4. If swallowed:** Do Not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with large amount of water. Consult a physician.
- 5. Most important symptoms and effects, both acute and delayed:** Refer to Section 11
- 6. Recommendations for immediate medical attention and special treatment needed:** No data available.

SECTION 5 – FIRE-FIGHTING MEASURES

- 1. Extinguishing equipment:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use suitable media for surrounding area.
- 2. Special hazards arising from the substance or mixture:** Product nature of decomposition not known.
- 3. Further Information:** No data available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- 1. Recommended equipment:** None recommended.
- 2. Personal precautions, protective equipment and emergency procedures:**
Use good personal hygiene practices. Avoid dust formation. Avoid breath vapors, mist or gas.
For personal protection see Section 8.
- 3. Environmental precautions:** Don't let product enter drains. Discharge into the environment must be avoided.
- 4. Methods and materials for containment and cleaning up:** No special handling required.

SECTION 7 – HANDLING AND STORAGE

- 1. Precautions for safe handling:**
Provide appropriate exhaust ventilation at place where dust is formed.
- 2. Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C.

Heat sensitive. Light sensitive. Air sensitive.

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. Exposure controls:

1.1 Appropriate engineering controls: General industrial hygiene practice.

1.2 Personal protective equipment:

Eye/Face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle products with gloves. Gloves must be inspected prior to use.

If handle this product with other substances, or under specific conditions, contact the glove supplier, industrial hygienist and safety officer for more details.

Body protection: Choose body protection in relations to its type, to the concentration and amount of dangerous substances, and to the specific work place. The type of protective equipment must be selected according to the concentration and the amount of the dangerous substance at the specific use situation and work place.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

1.3 Control of environmental exposure: Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

1. Appearance:

Color: White, off-white, and/or light yellow

Form: Lyophilized Powder, Crystals, Crystalline Powders, Fibers, and/or Chunks

2. Upper/lower flammability: No data available

3. Odor: Odorless

4. Odor threshold: No data available

5. Vapor pressure: No data available

6. Vapor density: No data available

7. pH: No data available

8. Relative density: No data available

9. Melting point/freezing point: No data available

10. Solubility: No data available

11. Initial boiling point and boiling range: No data available

12. Flash point: No data available

13. Evaporation rate: No data available

14. Flammability: No data available

15. Partition coefficient: No data available

16. Auto-ignition temperature: No data available

17. Decomposition temperature: No data available

18. Viscosity: No data available

19. Explosive properties: No data available

SECTION 10 – STABILITY AND REACTIVITY

1. Reactivity: No data available.

2. Chemical stability: Stable under recommended storage and normal use.

3. Possibility of hazardous reactions: No data available.

4. Conditions to avoid: Avoid heat, light and moisture.

5. Incompatible material: Strong oxidizing agents, amine, free radical initiators, chemically active metals.

6. Hazardous decomposition products: 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

1. Acute toxicity: No data available

2. Intraperitoneal: No data available

3. Inhalation: No data available.

4. Dermal: No data available.

5. Skin corrosion/irritation: No data available.

6. Serious eye damage/eye irritation: No data available.

7. Respiratory or skin sensitization: No data available.

8. Germ cell mutagenicity: No data available.

9. Carcinogenicity: No data available

10. Reproductive toxicity: No data available.

11. Specific target organ toxicity: No data available.

12. Aspiration hazard: No data available

13. Additional information:

RTECS: No data available

Note: The chemical, physical and toxicological properties of this product have not been thoroughly investigated to the best of our knowledge.

SECTION 12 – ECOLOGICAL INFORMATION

1. Ecotoxicity: No data available.

2. Persistence and degradability: No data available.

3. Bioaccumulative potential: No data available.

4. Mobility in soil: No data available.

5. Other adverse effect: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of by means to comply with all Local, State, and Federal Regulations or contact an approved and licensed disposal agency.

Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

SECTION 14 – TRANSPORT INFORMATION

1. UN number: Not applicable.

2. UN proper shipping name: Not dangerous goods.

3. Transport hazard class(es): Not applicable.

4. Packing group (if applicable): Not applicable.

5. Environmental hazards (e.g. Marine pollutant): Not applicable.

6. Transport in bulk (according to Annex II OF Marpol, 73/78 and the IBC Code): Not applicable.

7. Special Precautions: Not applicable.

SECTION 15 – REGULATORY INFORMATION

Not applicable.

SECTION 16 – OTHER INFORMATION

(including information on preparation and revision of the SDS)

Not applicable.

Further information:

The above information is believed to be accurate and represents the best information currently available to us. However, the information in this document does not purport to be all inclusive and serves only as a guide. WE MAKE NO WARRANTY OF MERCHANTABILITY OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED with respect to such information, Allegro 3D, Inc. and its Affiliates assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.