

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name: **Protein *GeBaGel*, Peptide *GeBaGel* Gels**
 Product No.: GG0010, GG0012, GG0412, GG0816, PGG0017
 Manufacturer: Gene Bio-Application Ltd.
 P.O.Box 206
 Kfar-Hanagid 76875
 Israel

Intended Use: Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Section 2. Composition, Information on Ingredients

<u>Ingredient Name</u>	<u>CAS No.</u>	<u>%</u>	<u>EC Number</u>	<u>Symbol</u>	<u>R-Pheases</u>
1) Polyacrylamide Gel	9003-05-8	<30	Not available.	--	Not controlled under dsd (Europe).
2) Tris(hydroxymethyl)aminomethane	77-86-1	<2.5	201-064-4	Xi	R36/37/38
3) Sodium Azide	26628-22-8	0.02	247-852-1	T+, N	R28, R32, R50/53
4) Acrylamide	79-06-1	<0.1	201-173-7	T	R24/25, R45, R46, R48/23/24/25
5) Water	7732-18-5	to 100	231-791-2	--	Not controlled under dsd (Europe).

Section 3. Hazards Identification

United States: Review the most current and approved institutional guideline, protocol, standard operating procedure(s) and MSDS(s) for the proper handling of institutional materials/equipment associated with the use of this product.

Emergency Overview: **WARNING!**
 CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
 LUNGS, RESPIRATORY TRACT, SKIN, EYES.
 MAY BE HARMFUL IF SWALLOWED.
 Do not ingest. Wash thoroughly after handling.

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
 Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant).

Carcinogenic Effects Data: None.

Medical Conditions Aggravated

by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Overexposure/Signs/Symptoms: Not available.

Europe

Classification: Not controlled under dsd (Europe).

Physical/chemical hazards: Not applicable.

Human health hazards: Not applicable.

Environmental hazards: Not applicable.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Notice to Reader:	Get immediate medical attention.
Effects and symptoms:	
Inhalation	Not applicable.
Ingestion	Slightly hazardous in case of ingestion.
Skin Contact	Sensitization of the product: Not available. Slightly hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Eye Contact	Slightly hazardous in case of eye contact (irritant).
Aggravating conditions	Repeated or prolonged exposure is not known to aggravate medical condition

First-Aid Measures

Inhalation:	Not applicable.
Ingestion:	Drink plenty of water.
Skin Contact:	After contact with skin, wash immediately with plenty of water.
Eye Contact:	In case of contact with eyes, rinse immediately with plenty of water. Seek medical attention if irritation persists.
Notes to Physician:	Not available.
Protection of first-aiders:	Not available

Section 5. Fire Fighting Measures

Flammability of the Product:	Non-flammable.
Flash Points:	Not applicable.
Fire Hazards in Presence of Various Substances:	Not applicable.
Fire Fighting Media and Instructions:	Not applicable.
Protective Clothing (Fire):	Not applicable.
Hazardous thermal (de)composition Products:	Not applicable.

Section 6. Accidental Release Measures

Personal precautions:	Safety glasses. Lab coat. Gloves.
Environmental Precautions and Clean-up Methods:	Not applicable.
Small Spill and Leak:	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Section 7. Handling and Storage

Handling:	Do not ingest. Wash thoroughly after handling.
Storage:	Store between 4 to 8°C (39.2 to 46.4°F).
Intended Use:	Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Packaging materials

Suitable / Not suitable:	Use original container.
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Section 8. Exposure Controls/Personal Protection

Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Exposure Limit Values

Ingredient NameOccupational Exposure Limits**United States**

1) Tris(hydroxymethyl)aminomethane Not available.

Sweden

1) Tris(hydroxymethyl)aminomethane Not available.

Germany

1) Tris(hydroxymethyl)aminomethane Not available.

Netherlands

1) Tris(hydroxymethyl)aminomethane Not available.

France

1) Tris(hydroxymethyl)aminomethane Not available.

Norway

1) Tris(hydroxymethyl)aminomethane Not available.

Denmark

1) Tris(hydroxymethyl)aminomethane Not available.

Personal Protection

Eyes: Splash goggles.

Body: Lab coat.

Hands: Gloves.

Respiratory: Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Solid. (Gel in a plastic cassette)	Odor Odorless.
Molecular Weight:	Not applicable.	Taste Not available.
pH (1% Soln/Water)	7.0 [Neutral.]	Color Clear
Melting/Freezing Point	168.5 to 171°C (335.3 to 339.8°F) based on data for: Tris(hydroxymethyl)aminomethane.	
Specific Gravity	The only known value is 1 (Water = 1) (Water).	
Dispersion Properties	See solubility in water, acetone.	
Solubility	Partially soluble in acetone. Insoluble in cold water, hot water.	

Section 10. Stability and Reactivity

Stability and Reactivity:	The product is stable.
Conditions to avoid:	No additional remark.
Materials to avoid:	Reactive with oxidizing agents. Slightly reactive to reactive with metals, acids, alkalis.
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	Not applicable.

Section 11. Toxicological Information

Toxicity to Animals:	Acute oral toxicity (LD50): >1000 mg/kg [Rat]. (Polyacrylamide Gel).
Chronic Effects on Humans:	Not available.
Other Toxic Effects on Humans:	Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation (lung irritant).
Special Remarks on Toxicity to Animals:	Not available.

Special Remarks on Chronic Effects on Humans: Not available.
 Special Remarks on Other Toxic Effects on Humans: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated. (Polyacrylamide Gel)

Section 12. Ecological Information

Mobility: Not available.
 Persistence/degradability: Not available.
 Bioaccumulative potential: Not available.
 Ecotoxicity: Not available.

Section 13. Disposal Considerations

Waste Information: Waste must be disposed of in accordance with federal, state and local environmental control regulations.
 Waste Stream: Not available.

Section 14. Transport Information

Contact the supplier for all information regarding the proper transportation method for this material.

Section 15. Regulatory Information

Label Requirements

(Europe) This product is not classified according to the EU regulations.

U.S. Federal Regulations TSCA 8(b) inventory: Polyacrylamide Gel; Tris(hydroxymethyl)aminomethane; Sodium Azide; Water
 TSCA 8(d) H and S data reporting: Polyacrylamide Gel; Sodium Azide
 SARA 302/304/311/312 extremely hazardous substances: Sodium Azide
 SARA 302/304 emergency planning and notification: Sodium Azide
 SARA 302/304/311/312 hazardous chemicals: Sodium Azide
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium Azide: immediate health hazard

Clean Water Act (CWA) 307: No products were found.
 Clean Water Act (CWA) 311: No products were found.
 Clean air act (CAA) 112 accidental release prevention: No products were found.
 Clean air act (CAA) 112 regulated flammable substances: No products were found.
 Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

CEPA DSL: Polyacrylamide Gel; Tris(hydroxymethyl)aminomethane; Sodium Azide; Water
 CEPA NDSL: Sodium Azide

International Regulations

EINECS: Not available.

DSCL (EEC): This product is not classified according to the EU regulations.

International Lists: Australia (NICNAS): Polyacrylamide Gel; Tris(hydroxymethyl)aminomethane; Sodium Azide; Water

Germany water class: Polyacrylamide Gel; Sodium Azide

Korea (TCCL): Polyacrylamide Gel; Tris(hydroxymethyl)aminomethane; Sodium Azide; Water

State Regulations: Philippines (RA6969): Polyacrylamide Gel; Tris(hydroxymethyl)aminomethane; Sodium Azide; Water
 Pennsylvania RTK: Sodium Azide: (environmental hazard, generic environmental hazard)
 Florida: Sodium Azide
 Minnesota: Sodium Azide
 Massachusetts RTK: Sodium Azide
 New Jersey: Sodium Azide
 California prop. 65: No products were found.