

1. PRODUCT INFORMATION – MANUFACTURER DETAILS

- Product Name: LabCell™ GMEM
- Product Code: 13001
- Purpose of Use: Medium that promotes the growth of Baby Hamster Kidney (BHK-21) cells and supports research on genetic factors influencing cell functionality.
- Manufacturer/ Supplier: BacterLab Division – LABone Scientific Equipment Co., Ltd.
- Address: 228/13/3 Nguyen Thi Lang, Phu Loi Hamlet, Tan Phu Trung Commune, Cu Chi District, Ho Chi Minh City, Vietnam.

2. HAZARDS

- Classification: Not hazardous under normal conditions.
- Acute Effects: Slightly toxic upon direct contact with eyes and respiratory tract due to irritation. Non-toxic to skin and gastrointestinal tract.
- Chronic Effects: Non-carcinogenic, non-mutagenic, and non-teratogenic. No recorded health effects from repeated or prolonged exposure.
- Hazard Warnings: None.
- Precautionary Advice: Follow laboratory safety protocols; avoid ingestion or inhalation.

3. TYPICAL COMPOSITIONS

For 1 liter of medium (reference)

Component	Concentration (mg/L)
L-Cystine dihydrochloride	0,03129
L-Glutamine	0,292
L-Histidine hydrochloride monohydrate	0,021
L-Isoleucine	0,0524
L-Leucine	0,0524
L-Lysine hydrochloride	0,0731
L-Methionine	0,015
L-Phenylalanine	0,033
L-Tyrosine	0,0362
L-Threonine	0,0476
L-Tryptophan	0,008
L-Valine	0,0468
Calcium-D(+) pantothenate	0,002
Choline chloride	0,002
Pyridoxal hydrochloride	0,002
Folic acid	0,002
Myo-Inositol	0,0036
Nicotinamide	0,002

Riboflavin	0,0002
Thiamine hydrochloride	0,002
Phenol red	0,015
Glucose anhydrous	4,5
Calcium chloride anhydrous	0,2
Iron(III) nitrate nonahydrate	0,0001
Magnesium sulfate anhydrous	0,09767
Potassium chloride	0,4
Sodium chloride	6,4
Sodium dihydrogen phosphate monohydrate	0,1078

pH: 7,5 ± 0,3 at 25°C

4. FIRST AID MEASURES

- Respiratory: Move to fresh air. Seek medical attention if irritation persists.
- Skin: Wash thoroughly with water and soap.
- Eyes: Rinse eyes immediately with running water for at least 15 minutes, keeping eyelids open. Seek medical attention if irritation persists.
- Ingestion: Rinse mouth and drink plenty of water or milk. Do not induce vomiting. Seek medical attention if irritation persists.

5. FIRE SAFETY

- Fire/ Explosion Hazards: Non-flammable and non-explosive.
- Combustion Products: Carbon oxides (CO, CO₂).
- Flammability Limits: None.
- Firefighting Media: Water, foam, dry chemical, or CO₂.
- Protective Equipment: Standard firefighting protective gear.

6. SPILL MANAGEMENT

- Small Spills: Collect using suitable tools into a container for disposal. Wash contaminated surfaces with water.
- Personal Precautions: Use protective gloves; avoid direct contact with the product.
- Environmental Measures: Prevent spillage into drains or water systems.
- Cleaning Procedure: Collect with non-reactive tools and dispose according to regulations

7. HANDLING AND STORAGE

- Precautionary Measures: Avoid ingestion. If ingested, bring the product label to the medical facility. Avoid contact with skin, eyes, and clothing. Wash hands after use. Keep out of reach of children.
- Storage: Store at a cool temperature (2 – 8°C) in a dry, clean, well-ventilated area. Avoid direct sunlight.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- Exposure Limits: None specified.

- Personal Protective Equipment:
 - Eye Protection: Safety goggles.
 - Skin Protection: Laboratory gloves.
 - Respiratory Protection: Medical masks.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form: Liquid
- Color: Bright red, transparent
- Odor: Odorless
- pH: $7,5 \pm 0,3$ at 25°C
- Solubility: Soluble in water

10. STABILITY AND REACTIVITY

- Reactivity: Stable under normal conditions.
- Incompatible Materials: Strong acids and bases.
- Chemical Stability: Stable under recommended storage conditions.
- Conditions to Avoid: Avoid humidity and direct sunlight.
- Hazardous Decomposition Products: None under normal usage.

11. TOXICOLOGICAL INFORMATION

- Respiratory: Non-irritating.
- Gastrointestinal: Generally non-irritating; may cause diarrhea in rare cases. Do not ingest.
- Eyes: May cause irritation characterized by redness and swelling. Avoid contact with eyes.
- Acute Toxicity: Not classified.
- Chronic Toxicity: No known effects.
- Carcinogenicity: Not classified as a carcinogen.

12. ENVIRONMENTAL IMPACT

- Ecotoxicity: Not expected to cause significant environmental harm.
- Biodegradability: Biodegradable.
- Bioaccumulation Potential: Low.
- Soil Mobility: Low.
- The product is water-insoluble. Components are nutrient substrates for microorganisms and are not known to have adverse environmental impacts.

13. WASTE DISPOSAL

- Dispose of waste according to medical waste disposal regulations. Avoid environmental release.
- Always wash hands after handling the product.
- Do not dispose into drains or the environment.

14. TRANSPORT INFORMATION

- UN Number: Not regulated.
- Hazard Class: Not classified.
- Packaging: Retain original packaging during transportation.

15. REGULATORY INFORMATION

Follow safety regulations for laboratory use and product handling.

16. OTHER INFORMATION

All information/ data in this MSDS is accurate and based on current data. However, the company provides no warranties regarding merchantability or other assurances.

Users are advised to verify suitability for specific purposes independently.

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