

## Product Data Sheet

**Glasgow's MEM with L-Glutamine, without Tryptose Phosphate Broth and Sodium Bicarbonate**  
**Product No. GB-GMEM-10LT, GB-GMEM-50LT**  
**Packing 10 Liters / 50 Liters**

### Product Description

| <b>Inorganic Salts</b>                                |            |
|---|------------|
| <b>COMPONENT</b>                                      | <b>g/L</b> |
| CaCl <sub>2</sub> • 2H <sub>2</sub> O                 | 0.265      |
| Fe(NO <sub>3</sub> ) <sub>3</sub> • 9H <sub>2</sub> O | 0.0001     |
| MgSO <sub>4</sub> (anhydrous)                         | 0.09767    |
| KCl   | 0.4        |
| NaHCO <sub>3</sub>                                    | —          |
| NaCl  | 6.4        |
| NaH <sub>2</sub> PO <sub>4</sub> (anhydrous)          | 0.1078     |
| <b>Amino Acids</b>                                    |            |
| L-Arginine • HCl                                      | 0.042      |
| L-Cystine • 2HCl                                      | 0.03129    |
| L-Glutamine   | 0.292      |
| L-Histidine • HCl • H <sub>2</sub> O                  | 0.021      |
| L-Isoleucine  | 0.0524     |
| L-Leucine   | 0.0524     |
| L-Lysine • HCl  | 0.0731     |
| L-Methionine  | 0.015      |
| L-Phenylalanine                                       | 0.033      |
| L-Threonine   | 0.0476     |
| L-Tryptophan  | 0.008      |
| L-Tyrosine • 2Na • 2H <sub>2</sub> O                  | 0.05219    |
| L-Valine  | 0.0468     |
| <b>Vitamins</b>                                       |            |
| Choline Chloride                                      | 0.002      |
| Folic Acid  | 0.002      |
| <i>myo</i> -Inositol                                  | 0.0036     |
| Niacinamide   | 0.002      |
| D-Pantothenic Acid • ½Ca                              | 0.002      |
| Pyridoxal • HCl                                       | 0.002      |
| Riboflavin  | 0.0002     |
| Thiamine • HCl  | 0.002      |
| <b>Other</b>  |            |
| D-Glucose   | 4.5        |
| Phenol Red • Na                                       | 0.0213     |
| <b>ADD</b>  |            |
| L-Glutamine   | —          |
| Sodium Bicarbonate                                    | 2.75       |



### **Product Information**

Glasgow Minimum Essential Medium was used to study the genetic factors affecting cell competence. The polyoma virus was used to transform four fibroblast clones from a culture of baby hamster kidney cells. The medium was developed by modifying Eagle's BME by adding 10% tryptose phosphate and twice the normal concentration of amino acids and vitamins.

### **Preparation of 1 liter liquid medium**

1. Suspend 12.5 g in 1000 ml tissue culture grade water with constant, gentle stirring until the powder is completely dissolved. Do not heat the water.
2. Add 2.75 of Sodium Bicarbonate and Tryptose Phosphate Broth solution for 1 liter of medium and stir until dissolved.
3. Store liquid medium at +2°C to +8°C and in dark until use.

### **Precautions and Disclaimer**

This product is for research use only.