

## Technical Data Sheet

21/07/2017

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### Basal Medium Eagle w/ Earle's Salts w/ L-Glutamine w/o Sodium Bicarbonate

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Product code :  
PM-B1007

**Theoretical pH :** 5.9 ± 0.3

**Osmolality :** 250 mOsm/kg ± 10 %

**Storage conditions :** Store dry powder medium at +2°C to +8°C  
Store hydrated medium at +2°C to +8°C, protected from light

**Shelf life :** 48 months

**Sterility tests :**

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Endotoxin :** < 1 EU/ml (<0.1 ng/ml)

**Glucose :** 100 mg/100ml ± 10%

**Composition :** Available on request.

**Recommended use :**

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store the product in a dry area
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- Protect the product from any form of humidity
- Use, in one time, after opening, the entire quantity of product of the container, without making a concentrated solution (to avoid the formation of precipitates). If it is not possible, close the container immediately after sampling the quantity of powder required.

- Supplements can be added prior to sterile filtration of the medium or aseptically introduced to sterile medium (respect the final concentration of the media). The nature of the supplements may affect storage conditions and shelf life of the medium.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

## **Description :**

Basal Medium Eagle (BME), developed by Harry Eagle, is one of the most widely used of all synthetic cell culture media. There are several "basal" media described by Eagle that vary slightly from one another. The Tissue Culture Association recommends use of the name "Eagle's Basal Medium" to describe only the formula developed to support HeLa cells. This basal medium formula was developed as a result of numerous studies carried out in the late 1950's to determine the essential nutritional requirements and other factors critical to the growth of cells in culture. Historically, BME has been used in studies conducted to measure the growth response of normal (WI-38) and transformed (mouse and HeLa) cells in monolayer culture. BME, when properly supplemented, has demonstrated wide applicability, for supporting monolayer growth of a wide variety of normal and transformed cell lines. BME is the predecessor of Eagle's Minimum Essential Medium (MEM) and Dulbecco's Modified Eagle's Medium (DME).

## **Uses :**

- 1- Measure 80 - 90% of final required volume of water. Water temperature should be 15-30°C.
- 2- While gently stirring the water, add the powdered medium (9.23 g/l). Stir until dissolved. Do not heat.
- 3- Rinse original package with a small amount of water to remove all traces of powder. Add to solution in step 2.
- 4- For each litre being prepared, add 2.20g sodium bicarbonate or 29.3 ml of 7.5% sodium bicarbonate solution
- 5- While stirring, adjust the pH of the medium to 0,1 – 0,3 pH units below the desired pH since it may rise during filtration using 1 N HCl or 1 N NaOH
- 6- Add additional water to bring the solution to final volume.
- 7- Sterilize immediately by filtration using a membrane with a porosity of 0.22 microns.
- 8- Aseptically dispense medium into sterile container.

Supplements can be added prior to filtration or introduced aseptically to sterile medium.

## **Signs of Deterioration :**

Dry powder medium should be free flowing. Do not use if powder caked. Prepared medium should be cleared of particulates and flocculent material. Do not use if liquid medium is cloudy or contains precipitate. Other evidence of deterioration may include colour change or degradation of physical or performance characteristics.