ClearLine	Technical data sheet Raw Powder	Ref : 509365

HEPES, cell culture tested

CAS N°: 7365-45-9

Molecular weight: 238.3 g/mol

Chemical formula: $C_8H_{18}N_2O_4S$

Colour: White free-flowing crystalline powder

Storage conditions: Room Temperature

Shelf life: 36 months

Tests and Specifications:
- Solubility in water: Soluble
- pH in solution: 5.75 ± 0.75
- Heavy metals: ≤ 5 ppm
- Loss on drying: ≤ 0.3 %
- Assay: 100 % ± 0.5 %

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. If it is not possible, close the container immediately after sampling the quantity of powder required.

The product is intended to be used in vitro for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

Application:
Hepes is a widely used buffer in biological studies. In cell culture, Hepes is generally used at 10 to 25mM. Hepes is considered as a better buffer than the sodium bicarbonate in cell culture. It is effective as a buffer at pH 6.8 to 8.2
A buffer solution of HEPES can be prepared by adding Hepes to water, the pH must be adjusted with sodium hydroxide or potassium hydroxide near to 7.0.
Then, the solution can be filtered.

NB: Hepes is not recommended for some applications with proteins because it interferes with the Folin protein assay but not with the Biuret assay.

DOMINIQUE DUTSCHER SAS