

**PRODUCT CODE: 414944**

## **Buffered Sodium Chloride-Peptone solution (Ph. Eur.) (Dehydrated Culture Media) for microbiology**

### **Preparation**

Suspend 16.1 grams of the medium in one litre of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C.

The colour is transparent. The dehydrated medium should be homogeneous, free-flowing and whitish in colour. If there are any physical changes, discard the medium.

### **Uses**

BUFFERED PEPTONE WATER is recommended by the European Pharmacopoeia in the Paragraph 2.6.12 'Microbiological examination of non – sterile products: Microbial enumeration test', and in the Paragraph 2.6.13 'Microbiological examination of non-Sterile products: test for specified micro-organisms' as a diluent for the homogenization of samples, effectiveness of culture media and validity of the counting method. When Buffered Peptone Water is used to make test suspensions, use them within 24 hours if stored at 2-8 °C.

Pancreatic digest of casein provides nitrogen, vitamins, minerals and amino acids essential for growth. Potassium phosphates act as a buffer system and Sodium chloride supplies essential electrolytes for transport and osmotic balance. It is used in the preparation of the samples to dissolve or dilute water-soluble products (1:10 dilution) and non-fatty products insoluble in water (in general 1:10 dilution, but some may require larger volumes of Buffered Peptone Water)

Fatty products are homogenized with a suitable sterile surface-active agent such as Polysorbate or TWEEN 80 heated if necessary to no more than 40°C or, in exceptional cases, to no more than 45°C. Mix carefully and if necessary maintain the temperature in a water-bath. Add enough of the pre-warmed Buffered Peptone Water diluent to make a 1 in 10 dilution of the original product.

### **Composition**

See in Data Sheet (TDS).

## Microbiological Test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30-35°C and observed after 18-24 hours.

Microorganism	Growth
<i>Staphylococcus aureus</i> ATCC 6538	Good
<i>Escherichia coli</i> ATCC 8739	Good
<i>Bacillus subtilis</i> ATCC 6633	Good
<i>Candida albicans</i> ATCC 10231	Good
<i>Aspergillus brasiliensis</i> ATCC 16404	Good
<i>Salmonella typhimurium</i> ATCC 14028	Good

## Storage

Once opened keep powdered medium closed to avoid hydration.